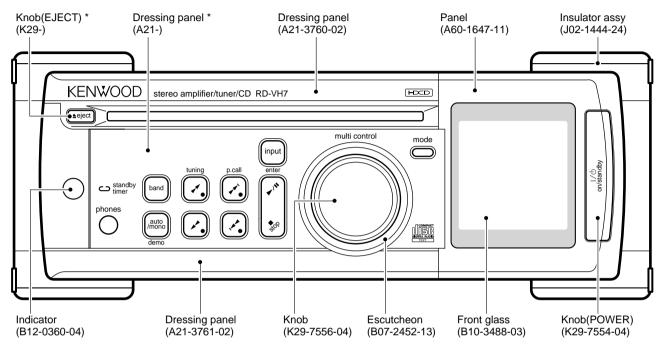
STEREO AMPLIFIER/TUNER/CD PLAYER

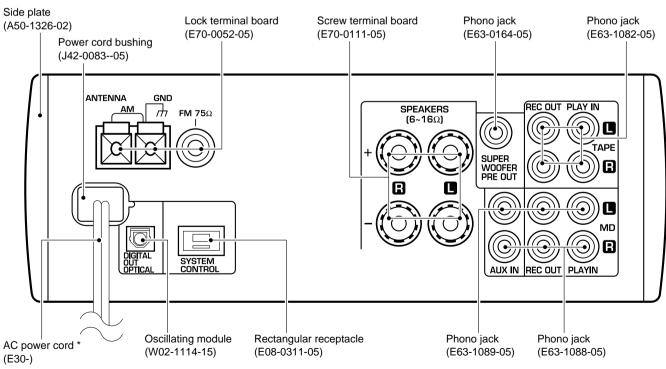
RD-VH7 SERVICE MANUAL

(VH-600/700)

KENWOOD

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*Refer to parts list on page 31.

In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD-Corp. certifies this equipment conforms to DHHS Regulations No. 21 CFR 1040. 10, Chapter 1, Subchapter J.

DANGER: Laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM.



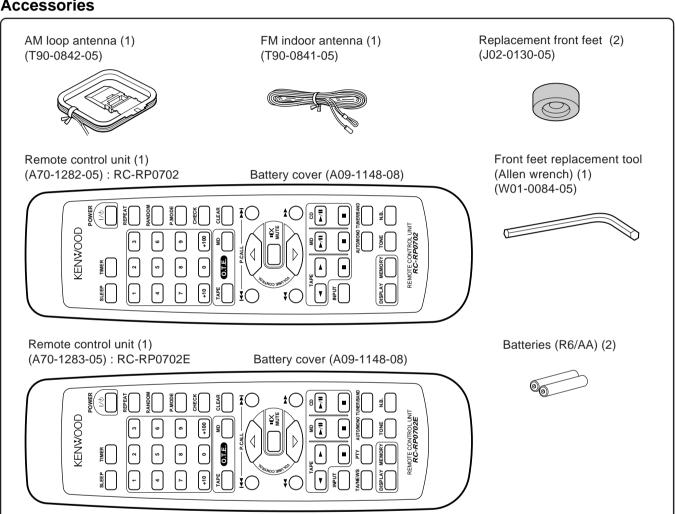
RD-VH7

CONTENTS / ACCESSORIES

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Accessories



System configuration

SYSTEM	CD	CASSETTE	SPEAKER	
NAME	RECEIVER	DECK		
VH-600	RD-VH7	-	LS-VH7	
VH-700	RD-VH7	X-VH7	LS-VH7	

Operation to reset

The microcomputer may fall into malfunction (impossibility to operate, erroneous display, etc.) when the power cord is unplugged while power is ON or due to an external factor. In this case, execute the following procedure to reset the microcomputer and return it to normal condition.

• Please note that resetting the microcomputer clears the contents stored in it returns it to condition when it left the factory.

RD-VH7

Unplug the power cord from the wall AC outlet and, while holding the "■ stop" key depressed, plug the power cord again.

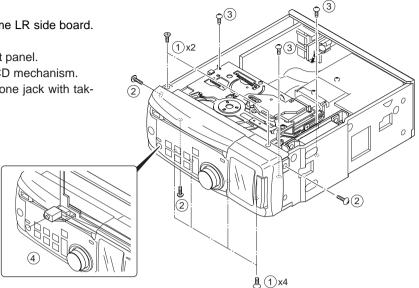
• If a CD has been loaded in the unit, it will be ejected automatically.

DISASSEMBLY FOR REPAIR

REMOVE CD MECHANISM

After remove insulator ass'y, then remove some LR side board. Next remove the top and the bottom boards.

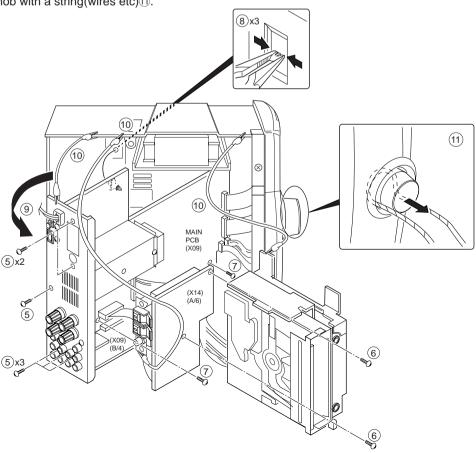
- 1) Remove the 6 screws 1, then remove the front panel.
- 2) Remove the 6 screws② ③, then remove the CD mechanism. When assemble the front panel, insert the phone jack with taking care④.



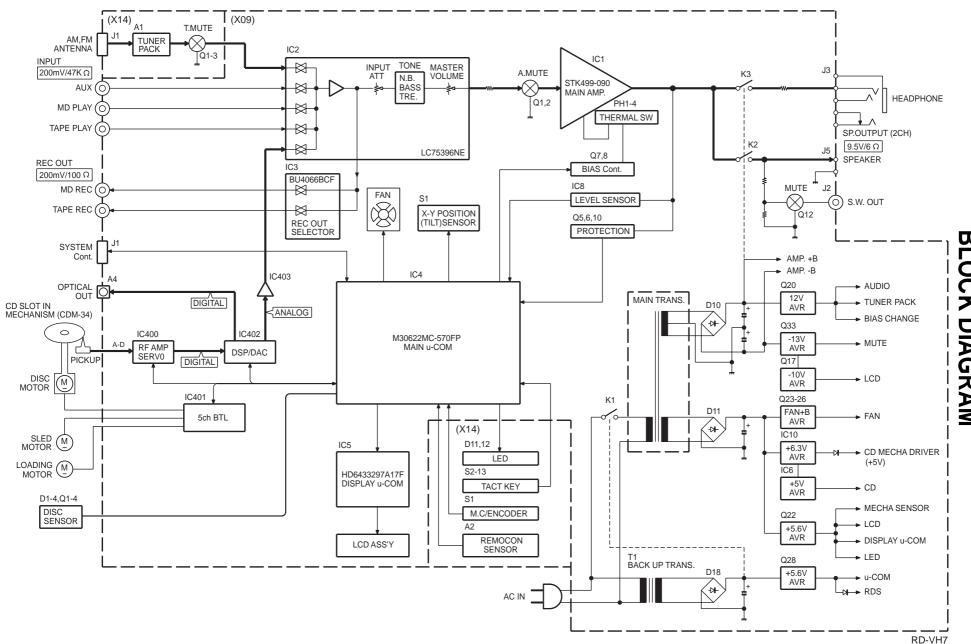
ELECTRIC CHECK

After assemble the sub panel and the front panel.

- 1) Remove the 8 screws 5, 6, then remove PCB(X09:B/4), PCB(X14:A/6).
- 2) Remove the 2 screws ⑦, the 3 PC supports®, then remove the CD mechanism.
- 3) After assemble PCB (X09:B/4) on the main PCB with the rear panel. then connect GND between the rear panel, the antenna and the CD mechanism with 3 alligator clip wires(10).
- ★ Remove the MULTI CONTROL knob with a string(wires etc)①.



BLOCK DIAGRAM



1. INITIAL SETTING

1-1 INITIAL CONDITIONS

(1) AMP

POWER OFF

PROTECTION NO DETECTED

MUTE OFF
SELECTOR TUNER
VOLUME 15

BALANCE CENTER

 NB
 2

 BASS
 0

 TREBLE
 0

 MD INPUT
 0 (-6dB)

 TAPE INPUT
 0 (-6dB)

 AUX INPUT
 0 (-6dB)

(2) TUNER

MULTI WINDOW

BAND FM

Pch MEMORY REFER TO (5)

LAST Pch --

LAST FREQ. LOWER LIMIT VALUE OF

EACH BANDS

AUTO/MONO AUTO
AUTO PRESET (MEMORY) E ON THRUST RECEIVING MODE

OFF

AUTO

RDS DISPLAY PS

(3) CLOCK, TIMER

CLOCK STOP, AM 12:00

PROG. 1,2

ON TIME AM12:00
OFF TIME AM12:00
PLAY MODE PLAY
SOURCE TUNER
Pch 01ch
REC MODE TAPE

O. T. T. OFF (AM7:00)

TIMER OPERATION MODE OF F
SLEEP TIMER OFF(5)
A. P. S. OFF

(4) CD

PLAY MODE TRACK
REPEAT OFF
RANDOM OFF
OPERATION MODE STOP

TIME DISPLAY SINGLE TIME

(5) TUNER PRESET FREQUENCY

ch	TUNER DESTINATION					
0	E1			K1	E3	
1	FM	97.5MHz	FM	97.5MHz	FM	97.5MHz
2	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
3	FM	89.1MHz	FM	89.1MHz	FM	89.1MHz
4	FM	108.0MHz	FM	108.0MHz	FM	108.0MHz
5	FM	90.0MHz	FM	90.0MHz	FM	90.0MHz
6	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
7	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
8	FM	87.5MHz	AM	1610KHz	FM	87.5MHz
9	AM	1602KHz	AM	1700KHz	AM	1602KHz
10	AM	999KHz	AM	1000KHz	AM	999KHz
11	AM	630KHz	AM	630KHz	AM	630KHz
12	AM	1440KHz	AM	1440KHz	AM	1440KHz
13	FM	106.0MHz	FM	106.0MHz	FM	106.0MHz
14	AM	531KHz	AM	530KHz	AM	531KHz
15	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
16	FM	98.0MHz	FM	98.0MHz	FM	98.0MHz
17	FM	98.5MHz	FM	98.5MHz	FM	98.5MHz
18	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
19	AM	990KHz	AM	990KHz	AM	990KHz
20	FM	97.7MHz	FM	97.4MHz	FM	97.7MHz
21	AM	531KHz	AM	530KHz	AM	531KHz
22	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
23	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
24	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
25	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
26	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
27	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
28	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
29	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
30	FM	106.0MHz	FM	106.0MHz	FM	106.0MHz
31	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
32	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
33	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
34	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
35	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
36	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
37	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
38	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz
39	FM	108.0MHz	FM	108.0MHz	FM	108.0MHz
40	AM	999KHz	AM	1000KHz	AM	999KHz

2. BACKED UP ITEMS

AC POWER OFF

(1) AMP

POWER BACK UP
PROTECTION CANCELLED

MUTE OFF
SELECTOR BACK UP
VOLUME BACK UP
BALANCE BACK UP

NB 2

BASS BACK UP
TREBLE BACK UP
MD INPUT BACK UP
TAPE INPUT BACK UP
AUX INPUT BACK UP
MULTI WINDOW BACK UP

(2) TUNER

BAND BACK UP
Pch MEMORY BACK UP
LAST Pch BACK UP
LAST FREQ. BACK UP
AUTO/MONO BACK UP
AUTO PRESET (MEMORY) BACK UP
E ON THRUST RECEIVING MODE

BACK UP

RDS DISPLAY PS

(3) CLOCK, TIMER

CLOCK POWER FAILURE MODE

PROG. 1, 2

BACK UP ON TIME OFF TIME **BACK UP** PLAY MODE **BACK UP** SOURCE BACK UP Pch **BACK UP REC MODE BACK UP** O. T. T. **BACK UP** TIMER OPERATION MODE BACK UP **SLEEP TIMER** OFF A. P. S. BACK UP

(4) CD

PLAY MODE TRACK
REPEAT OFF
RANDOM OFF
OPERATION MODE STOP

TIME DISPLAY SINGLE TIME

3. CONDITIONS ACCORDING TO THE DESTINATION

() SIGNIFIES PIN NUMBER OF u-COM(X09, IC4)

DESTI-	u-COM		DSW			RECEIVING	CHANNEL		
NATION	DESTI- NATION	2 (72PIN)	1 (71PIN)	0 (70PIN)	BAND	FREQUENCY RANGE	SPACE	IF	RF
J	J	0	1	0	FM	76.0MHz~ 87.5MHz	100kHz	-10.7MHz	25kHz
						87.5MHz~108.0MHz	50kHz	-10.7MHz	25kHz
					AM	531kHz~1629kHz	9kHz	+450kHz	9kHz
K,P	K1	0	0	0	FM	87.5MHz~108.0MHz	100kHz	+10.7MHz	25kHz
					AM	530kHz~1700kHz	10kHz	+450kHz	10kHz
M	E1	0	0	1	FM	87.5MHz~108.0MHz	50kHz	+10.7MHz	25kHz
					AM	531kHz~1602kHz	9kHz	+450kHz	9kHz
E,T	E3	1	1	0	FM	87.5MHz~108.0MHz	50kHz	+10.7MHz	25kHz
	RDS				AM	531kHz~1602kHz	9kHz	+450kHz	9kHz

4. LCD INDICATION

		PARTS OFF	LCD INDICATION
A PART			
B PART			
	C PART	PROG 1 2	
	D PART	OTT APS	
	E PART	RADIO T	

5. How to Set the Test Modes

5-1 AUX(MD/TAPE/AUX)

Setting: Insert the power cord to the wall outlet with pressing the MODE key.

Cancel: Press any key of operation.

A part A of display shows destination(*).

"standby" LED lights orange and green color alternately in this test mode.

A part E of display shows as follows after selecting MD mode.

selector	display E	display A
MD	MD##TEST	*-TYPE####
TAPE	TAP#TEST	*-TYPE####
AUX	AUX#TEST	*-TYPE####

#=space

5-1-1 Display Contrast Setting

Display contrast is available in LED and all segments of display lighting

Contrast is set to initialization if cancel test mode.

key	remarks
FF	contrast min.
skip up	initialization
play/pause	contrast max.

5-1-2 Mute Setting

Muting function is available by pressing AUTO/MONO key.

5-1-3 AUX IN Level Setting

Select the level of aux input from +3, 0, or -6 by pressing the FB key.

Multi control knob is available for same setting after mode key is pressed.

5-1-4 Noise Blanker Setting

Select the level of NB from NB1,NB2 or NB OFF by pressing the SKIP DOWN key.

5-1-5 BASS/TREBLE setting

Select the level of tone from tone max, tone flat or tone min by pressing the BAND key.

Display shows as follows.

	display A	display B	bass value	treble value
tone max.	BASS/TER##	######MAX	+8	+8
tone min.	BASS/TER##	######MIN	-8	-8
tone flat	BASS/TER##	####CENTER	0	0

Multi control knob is available for same setting after mode key is pressed.



5-1-6 Balance Setting

Select the level of balance from L-ch, max, R-ch max or center by pressing the MODE key.

Multi control knob is available for same setting after mode key is pressed.

5-2 TUNER

Setting: Insert the power cord to the wall outlet with pressing the BAND key.

Cancel: Press any key of operation.

A part E of display shows RADIO T.

"standby" LED lights orange and green color alternately in this test mode.

5-2-1 Dimmer Setting

Dimmer is available in LED and all segments of display lighting

Select the on/off of dimmer from dimmer on or dimmer off by pressing the CD/PLAY/PAUSE key.

Dimmer is set to OFF if cancel test mode.

5-2-2 P.CALL Setting

Select the step of p.call from 10,20, --- 40 or 01(10steps) by pressing the MODE key.

5-2-3 P. CALL Up/Down Setting

This setting is available by P.CALL UP/DOWN key.

5-2-4 Normal Mode (AUX/TUNER)

This setting is available by pressing MODE key for 1.5 secs.

CD eject works except tuner mode.

5-3 Sub Clock Oscillation Check

Setting: Insert the power cord to the wall outlet with pressing the INPUT key.

Cancel: Press any key of operation. However continue tuner test mode.

Display lights if oscillation and period are ok. Display shows ERR1(oscillation) or ERR2(period) and stop to check after 5 time checks.

5-4 CD

Setting: Insert the power cord to the wall outlet with pressing the PLAY key.

Cancel: Press any key of operation. However a part B of display is only cancel.

A part A of display shows mechanism sensors. Disc loading sensor/8cm sensor/12cm sensor/down switch in order. Display shows "-" at first time.

A part B of display shows CD-TEST LED is blanking.

5-4-1 Mechanism Sensor Check

Display shows $\ \ \text{from "-" to "0" or "x" after loading the disc. "0" means sensor works.}$

"x" not works.

5-4-2 Adjusting

key	description		
CD PLAY/	tracking servo on/off		
PAUSE	display B shows 05**:** if servo on		
	display B shows 03: if servo off		
skip up	horizontal or vertical position choice		
	display B shows 05V**:** in		
	horizontal mode		
	(servo gain and tracking bias)		

5-4-3 Pickup Movement

key	description
FF	pickup travels outwards and display B shows OUTSIDE.
FB	pickup travels inwards and display B shows INSIDE.

5-4-4 Initialization in Test Mode

CD stop to playback, Display B shows 0100:00

5-5 Factory Test Check

5-5-1 Initial Operation

Setting: Insert the power cord to the wall outlet with pressing the AUTO/MONO key.

Cancel: Turn power off.

- 1. Check sub clock oscillation. Display lights for 2 secs. If no problem.
- 2. Display A shows destination.
- 3. Display A shows sensor's condition with H or L after any key is pressed.

5-5-2 Display Check

Display's dots light on or off by pressing MODE key. Back light is always on.

5-5-3 Slot Check

key	description
FF	slot in operation. Display B shows LOAD
FB	slot out operation. Display B shows UNLOAD.

6. Initialization

Setting: Insert the power cord to the wall outlet with pressing the STOP key.

Initialize amplifier section(preset,time reset and RAM) after CD mechanism initialization.

Turn unit to standby mode.

Display shows INITIALIZE for check time.

Display shows CD EER if any trouble.

7. Cancel of Test Mode

Initialized and cancel test mode if pulling out power cord. Not initialized and cancel test mode if the power switch turns off.

Turn normal mode if pressing STOP key in stop condition of CD test mode.

8. Common Operation in Test Mode

- 1. Volume level is 40 at every test mode start up.
- 2. No muting with switching test mode. But muting-on if power switch on/off.
- AUX test mode is available for selecting MD,TAPE, or AUX
- Initialize setting value or condition if pull out the power cord.
- 5. AUX IN LEVEL is initialized to +3(0dB).
- 6. Input key is available for switching test mode item,tuner,cd, MD, tape and aux.

RD-VH7

CIRCUIT DESCRIPTION

9. Common Operation in AUX/TUNER Test Mode

9-1 Bias and Main Volume Level

Set unit to aux or tuner test mode.

Select the proper value with CD PLAY/PAUSE or CD STOP key.

•		
volume	bias	display D
0	pure A low	PURE#A#L
1	pure A low	PURE#A#L
20	pure A mid	PURE#A#M
40	pure A high	PURE#A#H
80	pure B low	PURE#B#L

Multi control knob is available for same setting after mode key is pressed.

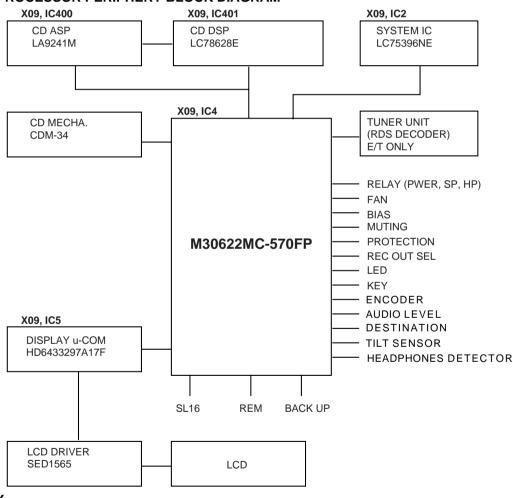
9-2 FAN Operation

Display C shows fan condition.

FAN	Display C
off	FAN#OFF#
low	FAN#low#
high	FAN#Hi##

10. MICROPROCESSOR; M30622MC-570FP(X09,IC4)

10-1 MICROPROCESSOR PERIPHERY BLOCK DIAGRAM



KEY MATRIX

* REFERENCE VOLTAGE: 5.0V

KEFEK	REFERENCE VOLTAGE: 5.0V						
VOLTAGE	0.000<	1.061<	1.726<	2.437<	3.156<	3.827<	4.586<
VOLTAGE	≦1.061	≦1.726	≦2.437	≦3.156	≦3.827	≦4.586	
KEY1			MODE		POWER		KEY
89PIN							OFF
KEY2		SKIP	PLAY/PAUSE	INPUT	BAND		KEY
90PIN	STOP	DOWN					OFF
KEY3	SKIP		TUNING	TUNING	AUTO/MONO		KEY
91PIN	UP	EJECT	UP	DOWN			OFF



10-2 MICROPROCESSOR PIN DESCRIPTION

Pin No.	Pin Name	I/O	Descriptin
1	RELAY HP	0	Headphones relay control terminal.
2	RELAY SP	0	Speaker relay control.
3	DISP_RST	0	Reset for communication between display u-COM and u-COM(IC4).
4	DISP CE	0	Chip enable for communication between display u-COM and u-COM(IC4).
5	DISP OUT	0	Data out for communication between display u-COM and u-COM(IC4).
6	DISP IN	I	Data In for communication between display u-COM and u-COM(IC4).
7	DISP CLK	0	Clock for communication between display u-COM and u-COM(IC4).
8	BYTE	ı	Connected to ground.
9	CNVSS	ı	Connected to ground.
10	XCIN	ı	Clock (32.768kHz).
11	XCOUT	0	Clock (32.768kHz).
12	RESET	ı	Reset terminal of microprocessor.
13	XOUT	0	Main clock.
14	VSS	-	Ground.
15	XIN	ı	Main clock.
16	VCC	-	Power supply(+5V).
17	NMI	I	Connected to power supply(+5V).
18	REMOCON	ı	Remocon signal Input.
19	DQSY	I	Text data reading permission signal Input.
20	WRQ	I	Q code reading permission signal Input.
21	NC	0	Unused.
22	DIMMER	0	LCD back light dimmer.
23	COIN	0	Output terminal of u-COM data.
24	TGL	I	Change-over for tracking gain.
25	NC	0	Unused.
26	FSEQ	I	EMF synchronism signal Input.
27	NC	0	Unused.
28	CQCK	0	Clock output.
29	SQOUT	I	Sub code Q Input.
30,31	NC	0	Unused.
32	SRDT	I	Text data Input.
33	SCLK	0	Clock for text data.
34	SDA	0	Unused.
35	SCL	0	Unused.
36,37	NC	0	Unused.
38	CD_RST	0	Reset signal output.
39	DRF	I	Focus OK signal Input.
40	RWC	0	Read/write control output.
41	SL-	0	Moves the sled slightly toward the Inner position of disc.
42	SL+	0	Moves the sled slightly toward the outer position of disc.
43	LOADING	0	Change-over for mechanism loading(+/-).
44	LOAD MUTE	0	Change-over for mechanism loading(ON/OFF).
45	NC	0	Unused.
46	LOAD_SW	I	Detection terminal for disc.
47,48	NC	0	Unused.
49	12DISC_SW	I	12cm disc detection terminal.
50	DOWN_SW	I	Control port of down motor for mechanism.

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CIRCUIT DESCRIPTION

Pin No.	Pin Name	I/O	Descriptin			
51	BACK_UP	I	Detection port for backup mode.			
52	NC	0	Unused.			
53,54	ENC1/2	ı	Rotary encoder1/2 Input.			
55	SL16 DATA	I/O	SL16 data input/output.			
56	SL16 BUSY	I/O	SL16 busy input/output.			
57	STBYLED	0	LED3 standby(red).			
58	ON LED	0	LED2 standby(grn).			
59	EJECTLED	0	LED1 (eject).			
60	MD REC SEL	0	Control terminal for MD rec.			
61	TAPE REC SEL	0	Control terminal for TAPE rec.			
62	VCC	-	Power supply.			
63	TILT SENS	ı	Detection terminal of FL lenght and breadth conditions.			
64	VSS	-	Ground.			
65	NC	0	Unused.			
66	A-MUTE	0	Audio muting control.			
67	-10V CONT.	0	Control terminal for LCD power supplly(-10V).			
68	BIAS HIGH	0	Bias control(HIGH).			
69	BIAS MID	0	Bias control(MID).			
70~72	DSW0~2	I	Discrimination of model destination(SW0~2).			
73	STEREO	ı	Detection terminal of stereo signal for TUNER.			
74	SD	ı	Detection terminal of SD signal for TUNER.			
75	RDS CLK	ı	RDS clock Input.(E/T version only)			
76	RDS DATA	ı	RDS data Input.(E/T version only)			
77	PLL DO	ı	PLL IF count Input.			
78	CE	0	Chip enable to LC75396(IC2) and LC72131(tuner pack IC2).			
79	DATA	0	Data to LC75396(IC2) and LC72131(tuner pack IC2).			
80	SCLK	0	Clock to LC75396(IC2) and LC72131(tuner pack IC2).			
81	T_MUTE	0	TUNER muting control.			
82	(EMPHASIS)	0	DE-EMPHASIS control.			
83	CD ON/OFF	0	Unused.			
84	NC	0	Unused.			
85	FAN _H/L	0	Fan H/L change-over.			
86	FAN ON/OFF	0	Fan ON/OFF control.			
87	POWER RE	0	Power relay control. H = ON L = OFF			
88	PROTECT	ı	Detection terminal of protection. H =protection ON			
89~91	KEY1~3	0	Key A/D Input 1~3.			
92,93	PT4,3	I	Detection terminal of 8cm disc.			
94	A LEVEL	ı	Audio level Input(A/D).			
95	RDS SLEVEL	I	RDS signal level Input(A/D). (E/T version only)			
96	AVSS	-	A/D ground.			
97	PROTECT TEMP	I	Detection terminalfor temperature compensating.			
98	VREF	-	A/D reference voltage.			
99	AVCC	-	A/D power supply(+5v).			
100	HP_IN	ı	Headphones detection terminal.			

CIRCUIT DESCRIPTION / CD MECHANISM DESCRIPTION

CIRCUIT DESCRIPTION

10-3 CONTROL PORT OF MICROPROCESSOR 10-3-1 TILT SENSOR

LCD INDICATION	TILT SENS (63PIN)
HORIZONTAL	L
VERTICAL	Н

10-3-2 REC OUT SELECTOR

RECOUT	REC SELA (61PIN)	REC SELB (60PIN)
MD	L	Н
TAPE	Н	L

10-3-3 HEADPHONES/SPEAKER CONTROL

PORT	HP_IN	RELAY SAP (2PIN)	RELAY HP (1PIN)
H/P (YES)	Н	L	Н
H/P (NO)	L	Н	L

10-3-4 PURE A, FAN, BIAS

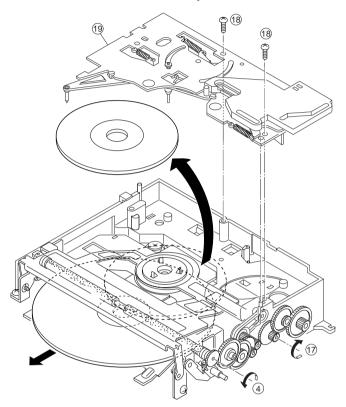
VOLUME VALUE	PURE A INDICATION	BIAS	
		MID 69Pin	HIGH 68Pin
0 1~9 10~29 30~49 50~	OFF ON ON ON OFF	H	LILL

AUDIO LEVEL VALUE	FAN				
	ON/OFF 86Pin	H/L 85Pin			
0~0.9V 1.0~3.9 4.0~	H L L	H			

CD MECHANISM DESCRIPTION

Mechanism jam cancel method

- 1. Move a disc with roller ④ :Move the gear ⑰ for CW with your finger → Move the roller ④ → Eject a disc
- 2. Cannot move 8cm disc without method 1.:Remove the 2 screws (8), then remove sub assy (9).



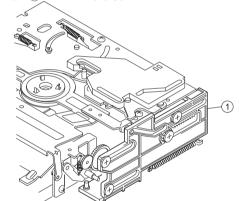
RD-VH7

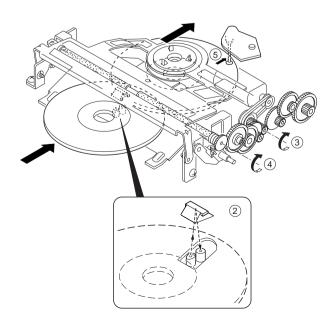
CD MECHANISM DESCRIPTION

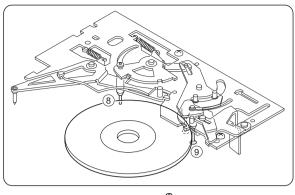
The initialization position of mechanism is the slider(loading) ① position at the back most. The mechanism moves from this position.

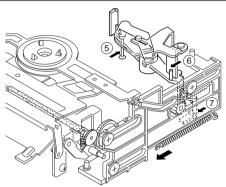
1. 8cm DISC loading in

- Insert a disc → Check by a disc detection sensor② (prism reflection ray OFF) → Start loading motor③ → Move the roller④ → Pull in a disc
- 2) Push the shaft of the arm assy (trigger A)⑤ with a disc → Move the arm assy(trigger B)⑥ → Move the arm (trigger)⑦
 - This time, decide PLAY position of a disc by the stoppers (shaft) of the arm assy(L)(8) and the arm assy (R)(9).
- 3) Move the arm (trigger) → Push out the slider (loading) ① for front → Move the gear(final) ⑩ → Move the slider (loading) ① for this side → Loading down the clamper of sub chassis ① and the roller ④ → Finish a disc catching
- 4) Move the slider (loading)① for this side → Move the slider (disc guide)② for right direction → Came off the moved lock of the arm assy (lock)③ → Move the arm assy (L)⑧ and the arm assy (R)⑨ → Keep off the stoppers from a disc. → Move the slider(loading)① for this side → Turn on the switch ⑭ → PLAY a disc



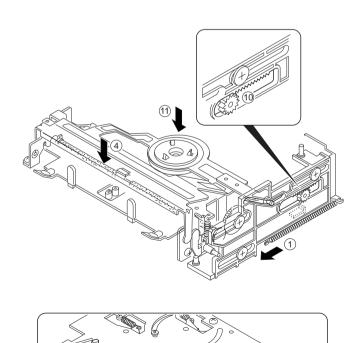




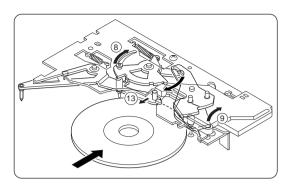


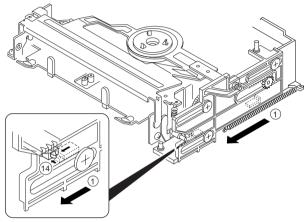
Note:

Set the loading slider to full backward if reinstall it.



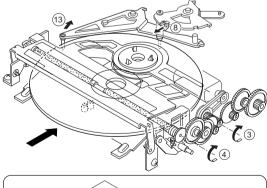
CD MECHANISM DESCRIPTION

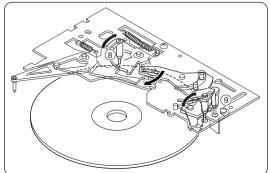


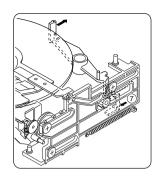


2. 12cm DISC loading in

- 1) The same 8cm DISC loading in
- 2) Push the arm assy (lock)⁽³⁾ with a disc → Keep apart the lock of the arm assy(L)⁽⁸⁾ → Decide PLAY position with the stoppers of the arm assy (L)⁽⁸⁾ and the arm assy (R)⁽⁹⁾ → Keep off the stoppers from a disc This time, move the arm (trigger)⁽⁷⁾ with a disc.
- 3) The same 8cm DISC loading in
- 4) The same 8cm DISC loading in

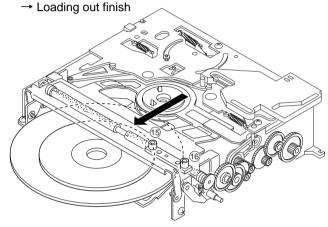






3. Loading out

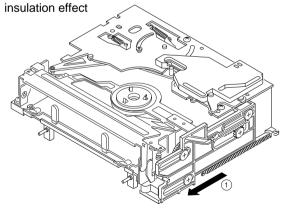
This moving become contrary moving of loading in. Final, a disc touch the 8cm disc eject sensor 6 or the 12cm disc eject sensor 6 \rightarrow Stop the loading motor 3

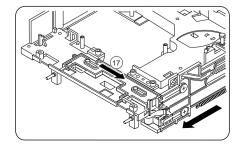


4. Lock and cancel of insulation mechanism

The initialization position of mechanism is the slider(loading) 1 position at the back most. This position become the insulation mechanism lock. Change the mechanism on this position normal.

Move the slider(loading) 1 for this side \rightarrow Move the slider(chassis lock) 1 for right direction \rightarrow Cancel the mechanism lock \rightarrow The mechanism become the





RD-VH7

ADJUSTMENT

CD section

NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CD PLAYER SETTINGS	ALIGNMENT	ALIGN FOR	FIG.				
	TEST MODE: While pressing the PLAY/PAUSE key ,plug the power cord into the AC power wall output. nsert TEST DISC.										
[1]	LASER CURRENT CHECK	Test disc type 4	Set the tester across R502(1 Ω) on the PCB(X09:D/4) of CD mechanism .	Press the PLAY/PAUSE key to check that the display is 03 or05.	-	50±20mA					
[2]	FOCUS ERROR BIAS (Set up vertically)	Test disc type 4	Connect an oscilloscope and jitter meter as follows. CH1:RF(CN402:7pin) CH2:FE1(CN402:6pin) GND:VC(CN402:4pin)	Press the PLAY/PAUSE key . Confirm that the display is 05.	FE BIAS VR401	Optimum eye pattern					
[3]	[3] FOCUS ERROR BIAS (Set up vertically) Test disc type 4		Connect an oscilloscope and jitter meter as follows. RF IN:RF(CN402:7pin) CH2:FE1(CN402:6pin) GND:VC(CN402:4pin)	Press the PLAY/PAUSE key . Confirm that the display is 05.	FE BIAS VR401	Jitter level minimum					
[4]	FOCUS ERROR BIAS (Set up horizontally)	Test disc type 4	Connect an oscilloscope and jitter meter as follows. CH1:RF(CN402:7pin) CH2:FE1(CN402:6pin) GND:VC(CN402:4pin)	Press the PLAY/PAUSE key . Confirm that the display is 05.	FE BIAS VR400	Optimum eye pattern					
[5]	FOCUS ERROR BIAS (Set up horizontally)	Test disc type 4	Connect an oscilloscope and jitter meter as follows. RF IN:RF(CN402:7pin) CH2:FE1(CN402:6pin) GND:VC(CN402:4pin)	Press the PLAY/PAUSE key . Confirm that the display is 05.	FE BIAS VR400	Jitter level minimum					

Note:

- Type 4disc: SONY YDS-18 Test Disc or equivalent.
- This unit needs to be adjusted by Jitter meter.
- Keep the step of adjustment.

PARTS DESCRIPTIONS

CAPACITORS

 $\frac{\text{CC}}{1} \quad \frac{45}{2} \quad \frac{\text{TH}}{3} \quad \frac{1 \text{H}}{4} \quad \frac{220}{5} \quad \frac{\text{J}}{6}$

1 = Type ... ceramic, electrolytic, etc.

4 = Voltage rating 5 = Value

2 = Shape ... round, square, ect. 3 = Temp, coefficient

6 = Tolerance



· Capacitor value

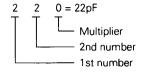
010 = 1pF

100 = 10pF

101 = 100pF

 $102 = 1000 pF = 0.001 \mu F$

 $103 = 0.01 \mu F$



• Temperature coefficient

1st Word	С	L	Р	R	S	Т	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
Dpm/°C	0	80	-150	-220	-330	-470	-750

2nd Word	G	Н	J	K	L
ppm/°C	±30	±60	±120	±250	±500

Example : CC45TH = -470 ± 60 ppm/°C

Tolerance (More than 10pF)

	Total district that Tops (
Code	С	D	G	J	К	М	Х	Z	Р	No code					
(%)	±0.25	±0.5	±2	±5	±10	±20	+40	+80	+100	More than $10\mu F - 10 \sim +50$					
							-20	- 20	-0	Less than 4.7µF -10 ~ +75					

(Less than 10pF)

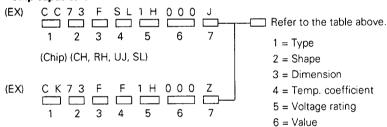
Code	В	С	D	F	G	
(pF)	±0.1	±0.25	±0.5	±1	±2	

Voltage rating

2nd word	Α	В	С	D	Е	F	G	Н	J	K	V
1st word											
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	-
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	-
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	-

7 = Tolerance

· Chip capacitors



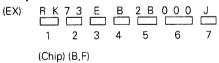
Dimension (Chip capacitors)

Dimension code	L	W	Т
Empty	5.6 ± 0.5	5.0 ± 0.5	Less than 2.0
А	4.5 ± 0.5	3.2 ± 0.4	Less than 2.0
В	4.5 ± 0.5	2.0 ± 0.3	Less than 2.0
С	4.5 ± 0.5	1.25 ± 0.2	Less than 1.25
D	3.2 ± 0.4	2.5 ± 0.3	Less than 1.5
E	3.2 ± 0.2	1.6 ± 0.2	Less than 1.25
F	2.0 ± 0.3	1.25 ± 0.2	Less than 1.25
G	1.6 ± 0.2	0.8 ± 0.2	Less than 1.0

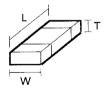
RESISTORS

· Chip resistor (Carbon)

(Chip) (B, F)



Dimension



Carbon resistor (Normal type)

(EX)						$\overset{\circ}{-}\overset{\circ}{-}$	
	1	2	3	4	5	6	7

1 = Type 5 = Rating wattage

2 = Shape 6 = Value
3 = Dimension 7 = Tolerance

4 = Temp. coefficient

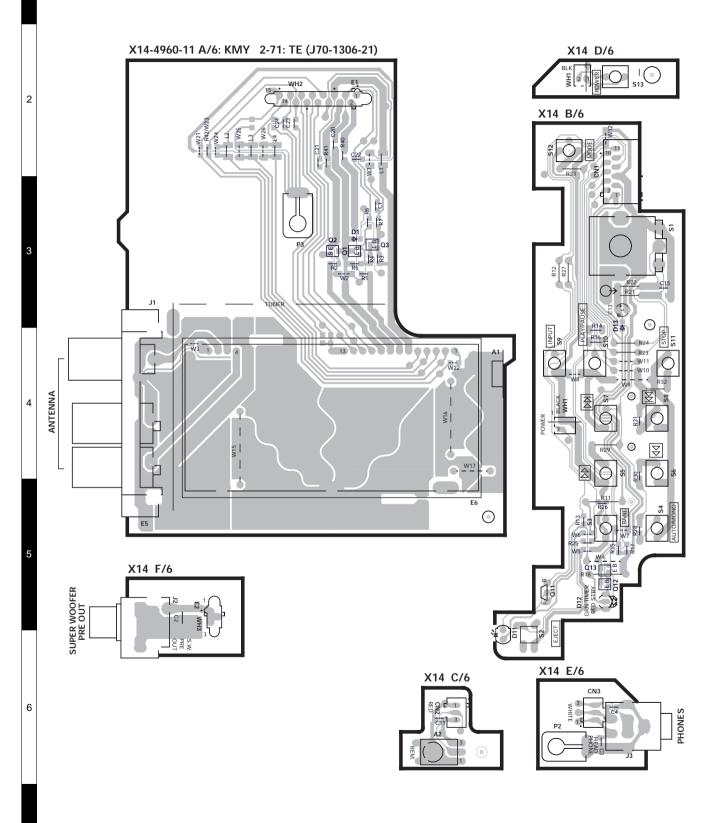
Dimension (Chip resistor)

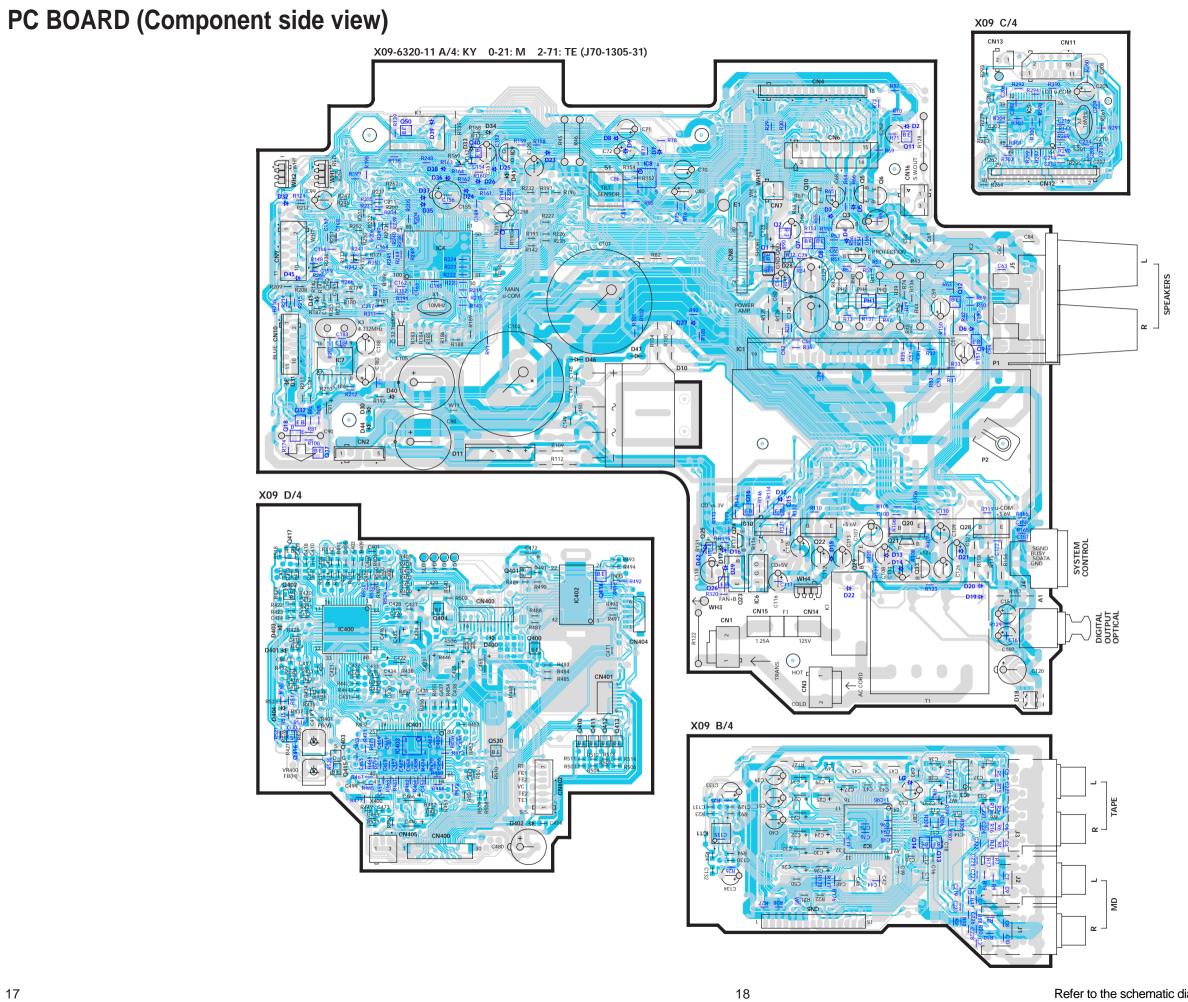
Dimension code	L	W	T
Е	3.2 ± 0.2	1.6 ± 0.2	1.0
F	2.0 ± 0.3	1.25 ± 0.2	1.0
G	1.6±0.2	0.8±0.2	0.5±0.1

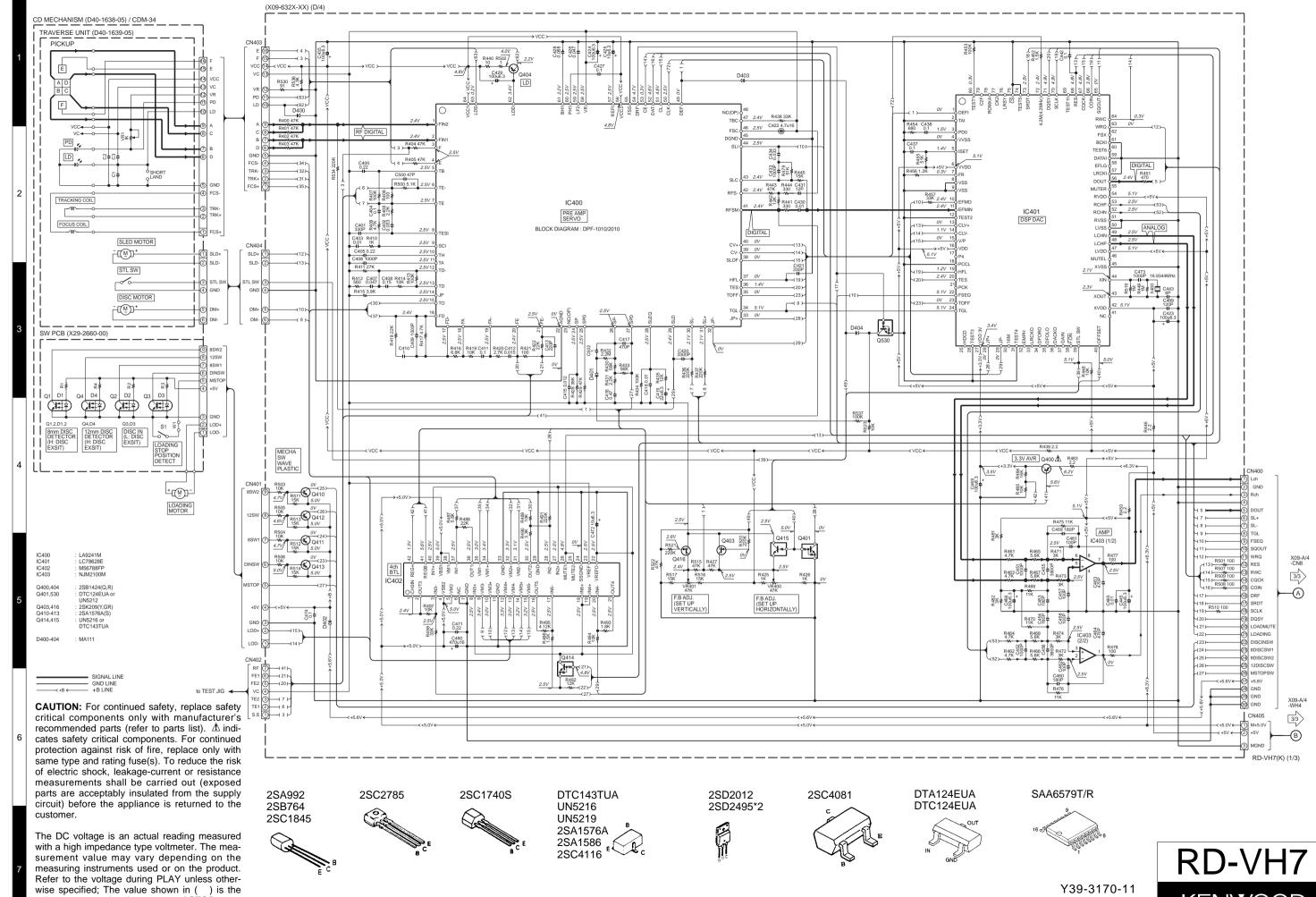
Rating wattage

Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	3A	1W
2A	1/10VV	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

PC BOARD (Component side view)







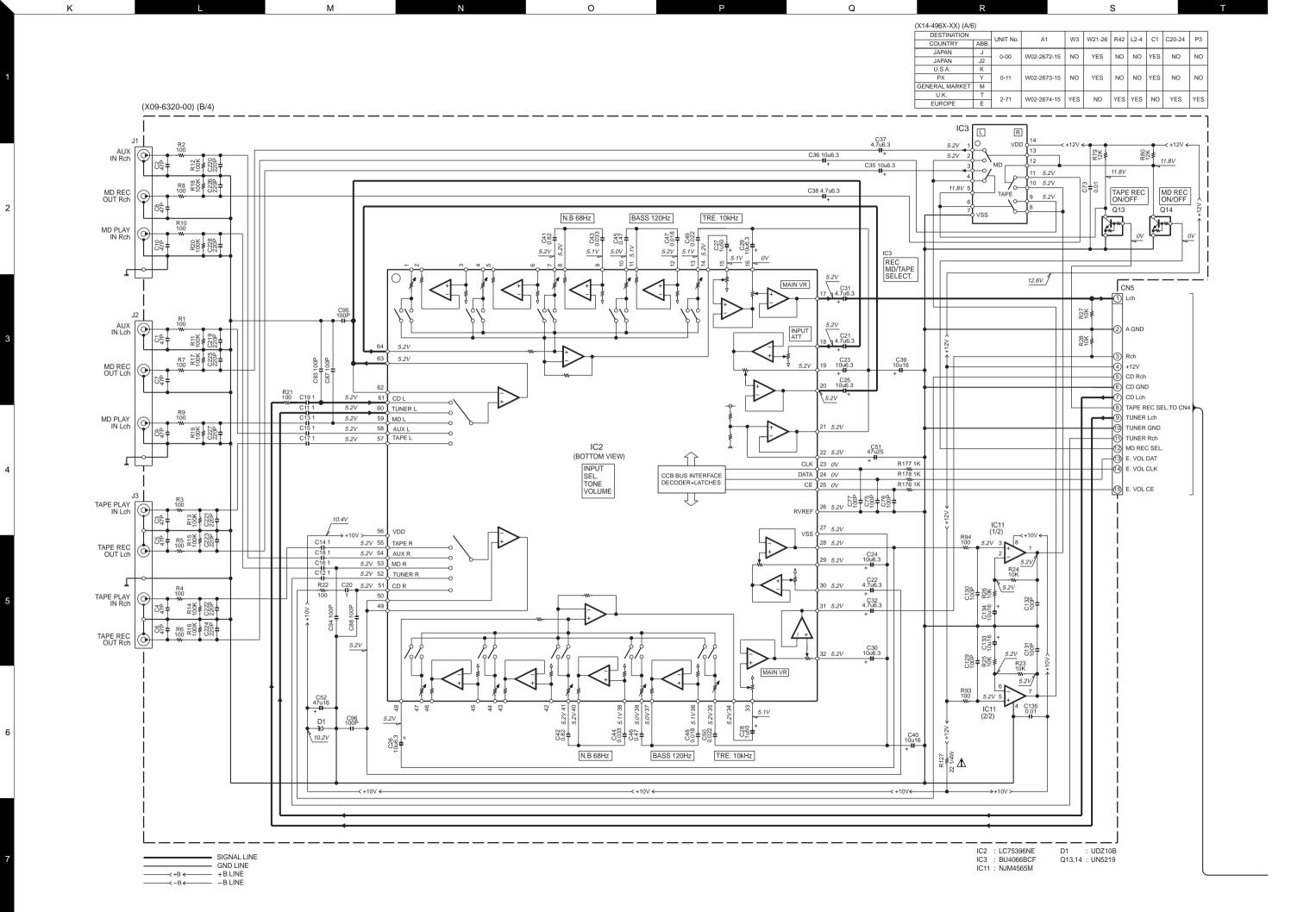
G

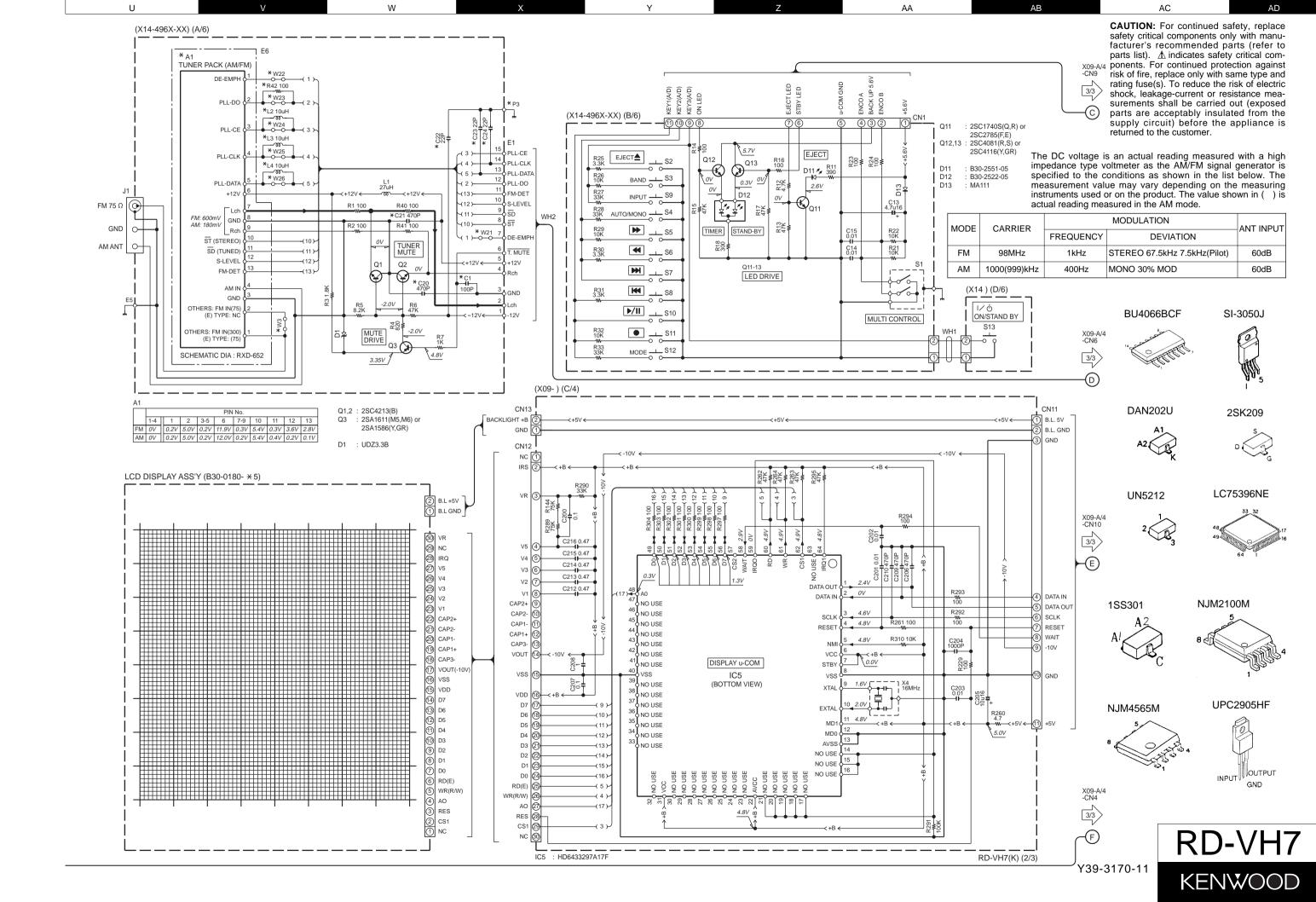
В

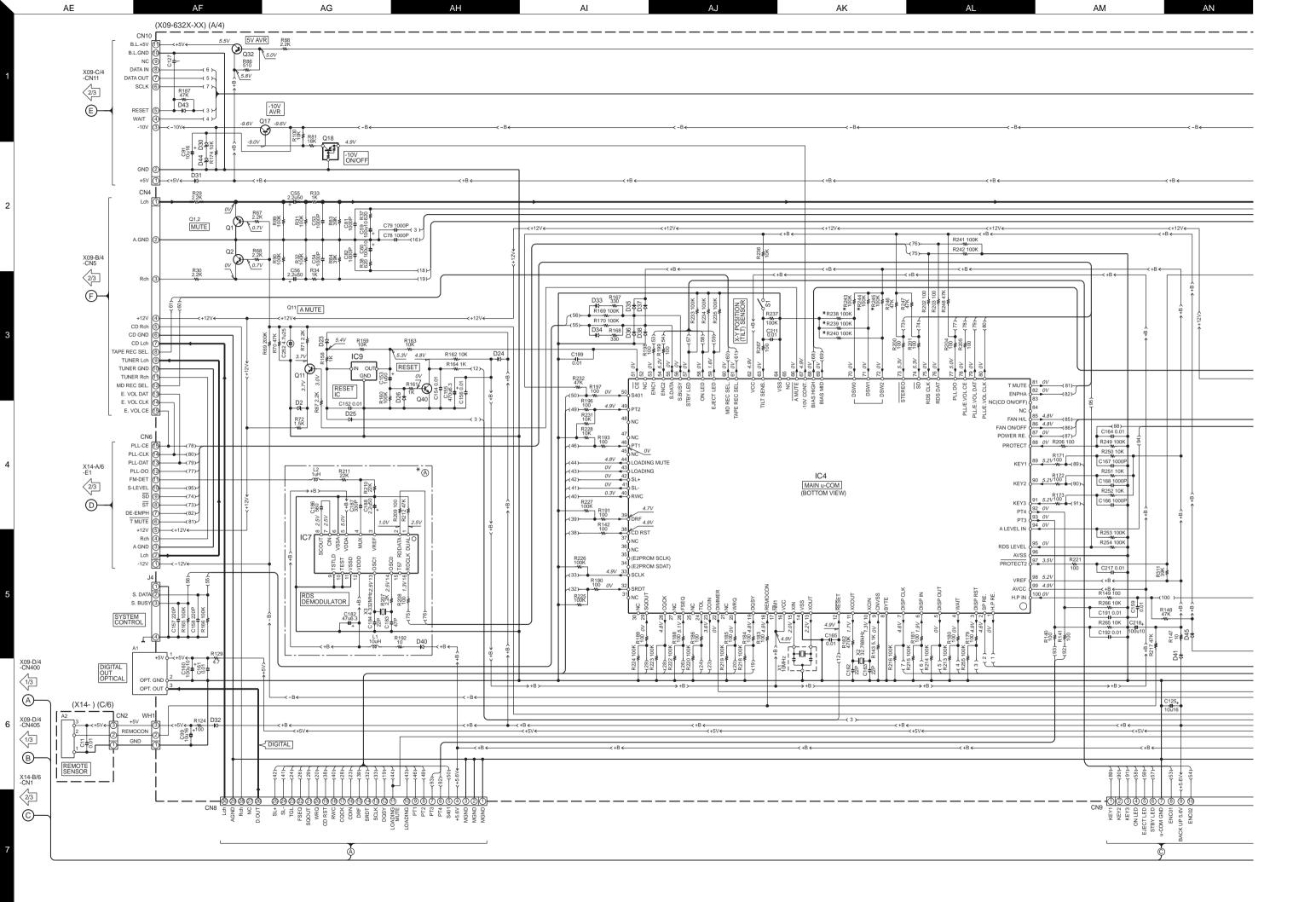
voltage measured at the moment of STOP.

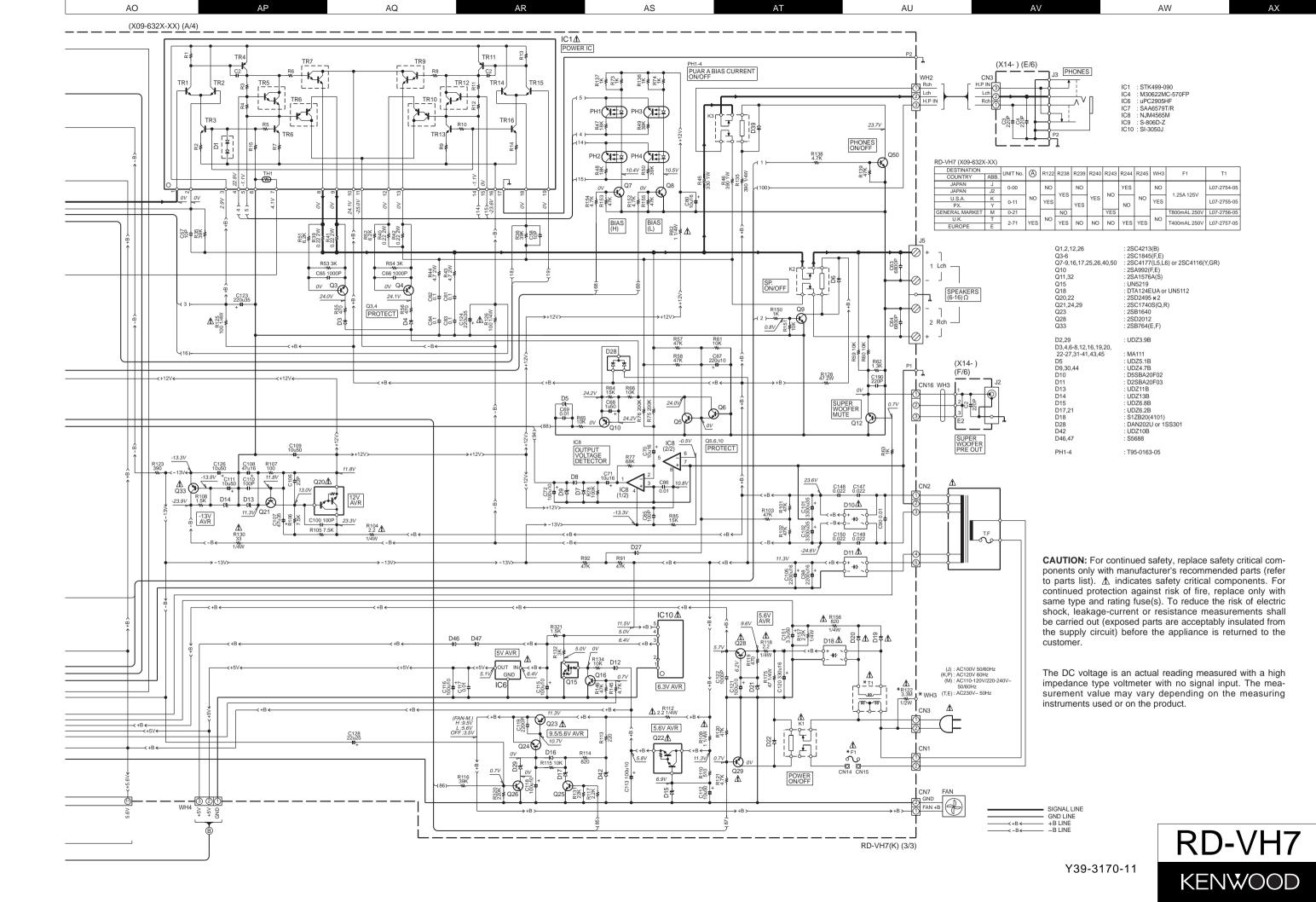
С

KENWOOD

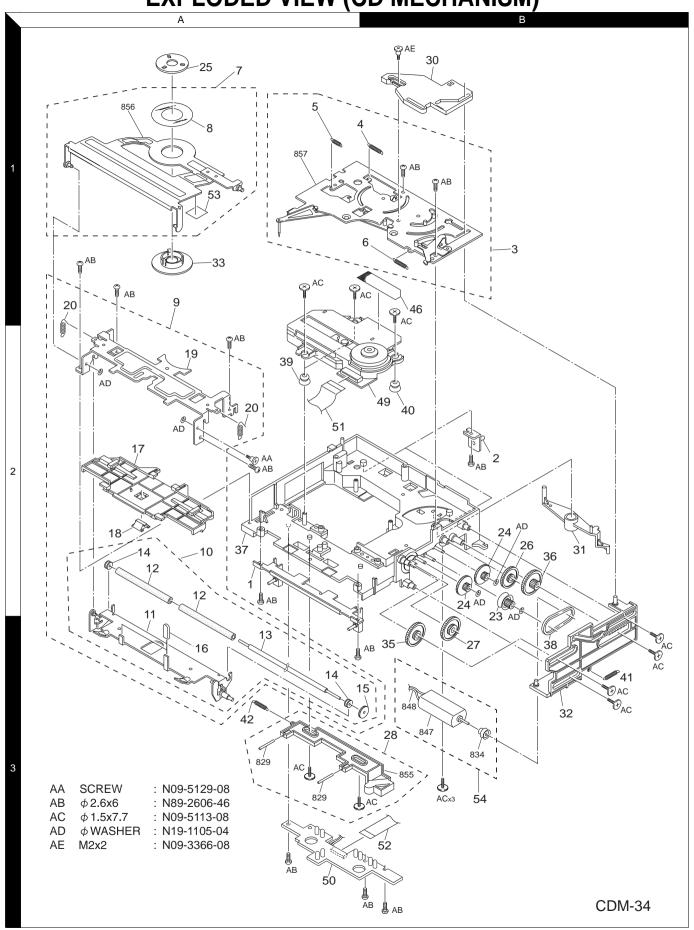






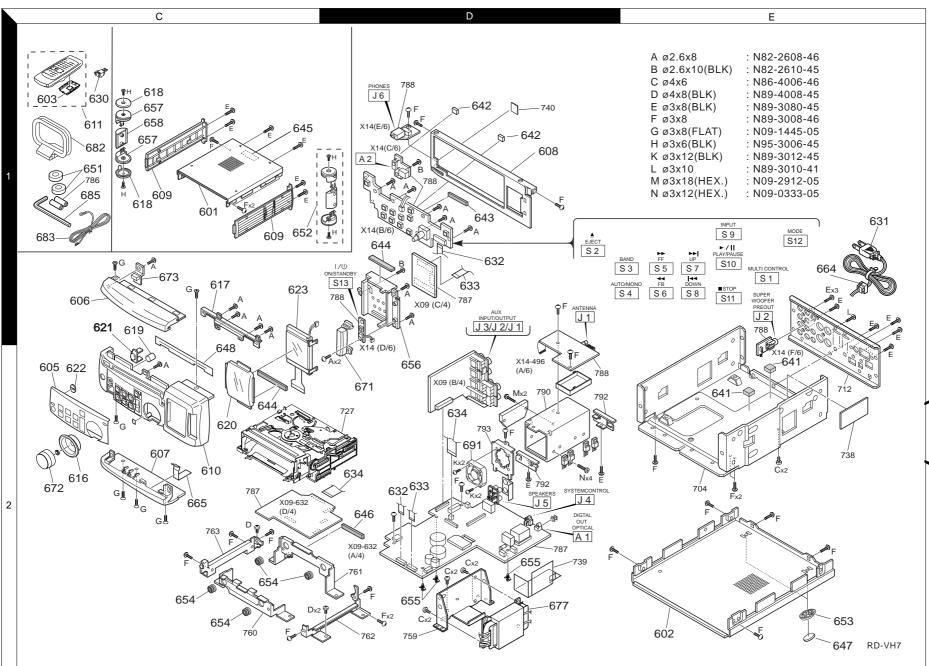


EXPLODED VIEW (CD MECHANISM)



Parts with exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (UNIT)



* New Parts

Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

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Teile ohne **Parts No.** werden nicht geliefert.

8

Ref. No	Add- ress	New Parts	Parts No.		Description		Desti- nation	Re mar
- - - -			H10-7574-02 H10-7575-02 H12-2465-04 H20-0576-04 H25-1595-04		N COVER		T M	
- - - -		* * * *	H25-1661-04 H25-1661-04 H30-0610-04 H50-3364-24 H50-3365-14	PROTECTION PROTECTION ADHESIVE DO ITEM CARTO ITEM CARTO	N BAG OUBLE-COATED N CASE	TAPE	KTE Y KE M	
-		*	H50-3366-14 H50-3456-04	ITEM CARTO			T Y	
651 652 653 654 655	1C 1C 2E 2C 2D	*	J02-0130-05 J02-1444-24 J02-1445-04 J02-1449-04 J19-5877-05	FOOT INSULATOR FOOT INSULATOR UNIT HOLDE				
656 657 658 664 665	2D 1C 1C 1E 2C	* * *	J19-5976-03 J19-5994-14 J19-5995-14 J42-0083-05 J69-0097-04	HOLDER HOLDER HOLDER POWER COR ADHESIVE TA				
-			J61-0098-05	WIRE BAND				
671 672 673 673	2D 2C 1C 1C	*	K29-7554-04 K29-7556-04 K29-7557-03 K29-7564-03	KNOB KNOB KNOB KNOB			MTE KY	
677 677 677	2D 2D 2D	* * *	L07-2723-05 L07-2724-05 L07-2725-05	POWER TRAI POWER TRAI POWER TRAI	NSFORMER		KY M TE	
682 683	1C 1C	*	T90-0842-05 T90-0841-05	LOOP ANTEN LEAD WIRE A				
685	1C		W01-0084-05	HEXAGON W	RENCH KEY			
			AUDIO (JNIT (X09	9-632X-XX)			
C1 -10 C11 -20 C21 ,22 C23 -26 C27 ,28		*	CC73FCH1H470J CK73FF1C105Z C92-0088-05 C92-0089-05 C92-0023-05	CHIP C CHIP C CHIP C CHIP C CHIP-ELE	47PF 1.0UF 4.7UF 10UF 1.0UF	J Z 6.3WV 6.3WV 50WV		
C29 ,30 C31 ,32 C35 ,36 C37 ,38 C39 ,40		*	C92-0089-05 C92-0088-05 C92-0089-05 C92-0088-05 CE04KW1C100M	CHIP C CHIP C CHIP C CHIP C ELECTRO	10UF 4.7UF 10UF 4.7UF 10UF	6.3WV 6.3WV 6.3WV 6.3WV 16WV		
C41 ,42 C43 ,44 C45 ,46 C47 ,48 C49 ,50			CF92FV1H824J CK73FB1E333KTA CF92FV1H474J CK73FB1H183KTA CK73FB1H223KTA	MF-C CHIP C MF-C CHIP C CHIP C	0.82UF 0.033UF 0.47UF 0.018UF 0.022UF	J K K K		
C51 C52 C53 ,54			CE04KW1E470M CE04KW1C470M CK73FB1H102K	ELECTRO ELECTRO CHIP C	47UF 47UF 1000PF	25WV 16WV K		
L : Scandinavi Y : PX(Far Eas Y : AAFES(Eur	t, Hawaii)	T:	USA P: Canada Europe E: Europe Australia Q: Russia	G: Germany	C: China V: China (Shanghai) M: Other Areas	I: Malaysia indicates safet	y critical com	pone

Ref. No	Add- ress	New Parts	Parts No.	Description	Desti- nation	Re- mark
				RD-VH7		
601 602 603 605 605	1C 2E 1C 2C 2C	* * *	A01-3696-01 A01-3697-01 A09-1148-08 A21-3759-13 A21-3763-13	METALLIC CABINET METALLIC CABINET CABINET DRESSING PANEL DRESSING PANEL	KMY TE	
606 607 608 609 610	1C 2C 1D 1C 2C	* * * * *	A21-3760-02 A21-3761-02 A22-1824-22 A50-1326-02 A60-1647-11	DRESSING PANEL DRESSING PANEL SUB PANEL SIDE PLATE PANEL		
611 611	1C 1C	*	A70-1282-05 A70-1283-05	REMOTE CONTROLLER ASSY REMOTE CONTROLLER ASSY	KMY TE	
616 617 618 619 620	2C 1C 1C 1C 1C	*	B07-2452-13 B07-2453-03 B09-0267-04 B09-0269-04 B10-3488-03	ESCUTCHEON ESCUTCHEON CAP CAP FRONT GLASS		
621 622 623 -	1C 1C 1C	*	B12-0360-04 B12-0364-14 B38-0180-05 B46-0310-03 B46-0328-03	INDICATOR INDICATOR LCD DISPLAY ASSY WARRANTY CARD WARRANTY CARD	TE KY	
- - - -		*	B46-0346-00 B46-0347-03 B58-1652-04 B58-1653-04 B59-1104-00	QUESTIONNAIRE CARD WARRANTY CARD CAUTION CARD (120V) CAUTION CARD SERVICE DIRECTORY	K K Y	
- - - -		* * * * *	B59-1437-00 B60-4280-00 B60-4283-00 B60-4284-00 B60-4285-00	SUB-INSTRUCTION MANUAL INSTRUCTION MANUAL(EN) INSTRUCTION MANUAL(FR) INSTRUCTION MANUAL(GE) INSTRUCTION MANUAL(NE)	KTY KE E	
- -		* *	B60-4286-00 B60-4287-00 B60-4288-00	INSTRUCTION MANUAL(IT) INSTRUCTION MANUAL(ES) INSTRUCTION MANUAL(TC)	E E M	
630 631 631 631 632	1C 1E 1E 1E 1D,2D	*	E03-0115-05 E30-2788-05 E30-2791-05 E30-2924-05 E35-2354-05	AC PLUG ADAPTER AC POWER CORD AC POWER CORD AC POWER CORD FLAT CABLE	M ME T KY	
633 634	1D,2D 2D	*	E35-2379-05 E35-2452-05	FLAT CABLE FLAT CABLE		
638	2E	*	F19-1101-04	SHIELDING PLATE		
641 642 643 644 645	2E 1D 1D 1D,2C 1C	*	G11-2350-04 G11-2369-04 G11-2404-04 G11-2272-04 G11-2490-04	CUSHION CUSHION CUSHION SOFT TAPE CUSHION (50X13X6)		
646 647 648	2D 2E 2C	* *	G11-2495-04 G11-2496-04 G11-2465-14	CUSHION CUSHION CUSHION		

X: Australia Q: Russia H: Korea M: Other Areas △ indicates safety critical components.

Y: AAFES(Europe)

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Ref. No	Add- ress	New Parts	Parts No.		Description		Desti- nation	Re- marks
C55 ,56 C57 ,58 C59 ,60 C61 ,62 C63 ,64			CE04KW1H2R2M CC73FCH1H100D CE04KW1A101M CQ93FMG1H104J CK73FB1H682K	ELECTRO CHIP C ELECTRO MYLAR CHIP C	2.2UF 10PF 100UF 0.10UF 6800PF	50WV D 10WV J K		
C65 ,66 C67 C68 C69 C70 ,71			CK73FB1H102K CE04KW1A221M CE04KW1H010M CK73FB1H103K CE04KW1C100M	CHIP C ELECTRO ELECTRO CHIP C ELECTRO	1000PF 220UF 1.0UF 0.010UF 10UF	K 10WV 50WV K 16WV		
C72 C73 C75 -77 C78 ,79 C80			CE04KW1A101M CK73FB1H103K CC73FSL1H101J CK73FB1H102K CE04KW1C100M	ELECTRO CHIP C CHIP C CHIP C ELECTRO	100UF 0.010UF 100PF 1000PF 10UF	10WV K J K 16WV		
C81 ,82 C83 ,84 C85 C86 C87 ,88			CK73FB1H102K CQ93FMG1H104J CC73FSL1H101J CK73FB1H103K CC73FSL1H101J	CHIP C MYLAR CHIP C CHIP C CHIP C	1000PF 0.10UF 100PF 0.010UF 100PF	K J K J		
C90 C91 C93 -96 C98 C99		*	C91-0971-05 C92-0037-05 CC73FSL1H101J C90-3858-05 CE04KW1C100M	FILM CHIP-ELE CHIP C ELECTRO ELECTRO	0.01UF 10UF 100PF 2200UF 10UF	250WV 16WV J 16WV 16WV		
C100 C101,102 C105 C106 C107		*	CC73FSL1H101J C90-3851-05 C90-3858-05 CC73FCH1H220J C90-3303-05	CHIP C ELECTRO ELECTRO CHIP C ELECTRO	100PF 3300UF 2200UF 22PF 47UF	J 35WV 16WV J 35WV		
C108 C109 C110 C111,112 C113			C90-3280-05 CE04KW1H100M CC73FSL1H101J CE04KW1H100M C90-3270-05	ELECTRO ELECTRO CHIP C ELECTRO ELECTRO	47UF 10UF 100PF 10UF 100UF	16WV 50WV J 50WV 10WV		
C115,116 C117 C118 C119 C120			C90-3270-05 CK73FB1H103K CE04KW1A101M CK73FB1H222K CE04KW1C331M	ELECTRO CHIP C ELECTRO CHIP C ELECTRO	100UF 0.010UF 100UF 2200PF 330UF	10WV K 10WV K 16WV		
C121 C122 C123,124 C125 C126		*	C90-3270-05 CK73FB1H102K C90-3305-05 CE04KW1C100M CE04KW1H100M	ELECTRO CHIP C ELECTRO ELECTRO ELECTRO	100UF 1000PF 220UF 10UF 10UF	10WV K 35WV 16WV 50WV		
C127 C128 C129-132 C133,134 C135			CK73FF1C105Z C92-0034-05 CC73FSL1H101J CE04KW1C100M CK73FB1H103K	CHIP C CHIP-ELE CHIP C ELECTRO CHIP C	1.0UF 22UF 100PF 10UF 0.010UF	Z 25WV J 16WV K		
C147-150 C151 C152 C153 C154			CK73FB1H223KTA CE04KW1H3R3M CK73FB1H103K CE04KW1H010M CK73FB1H103K	CHIP C ELECTRO CHIP C ELECTRO CHIP C	0.022UF 3.3UF 0.010UF 1.0UF 0.010UF	K 50WV K 50WV K		

Ref. No	Add- ress	New Parts	Parts No.		Description		Desti- nation	Re- marks
C155 C156 C157,158 C159 C160			CE04KW0J471M CK73FB1H103K CC73FSL1H221J CK73FB1H103K CE04KW1A101M	ELECTRO CHIP C CHIP C CHIP C ELECTRO	470UF 0.010UF 220PF 0.010UF 100UF	6.3WV K J K 10WV		
C161 C162,163 C164,165 C166-168 C182			CK73FB1H103K CC73FCH1H220J CK73FB1H103K CK73FB1H102K CE04KW0J470M	CHIP C CHIP C CHIP C CHIP C ELECTRO	0.010UF 22PF 0.010UF 1000PF 47UF	K J K K 6.3WV	TE	
C183 C184 C186 C187 C188			CC73FCH1H470J CC73FCH1H220J CK73FB1H561K CC73FSL1H331J CE04KW1H2R2M	CHIP C CHIP C CHIP C CHIP C ELECTRO	47PF 22PF 560PF 330PF 2.2UF	J J K J 50WV	TE TE TE TE TE	
C189 C190 C191,192 C200 C201-203			CK73FB1H103K CC73FSL1H221J CK73FB1H103K CK73FB1E104K CK73FB1H103K	CHIP C CHIP C CHIP C CHIP C CHIP C	0.010UF 220PF 0.010UF 0.10UF 0.010UF	K K K K		
C204 C205 C206 C207 C208			CK73FB1H102K CE04KW1C100M CK73FB1H471K CK73FB1E104K CK73FF1C105Z	CHIP C ELECTRO CHIP C CHIP C CHIP C	1000PF 10UF 470PF 0.10UF 1.0UF	K 16WV K K Z		
C209,210 C211 C212-216 C217 C218			CK73FB1H471K CK73FB1H103K CK73FF1E474Z CK73FB1H103K CE04KW1A101M	CHIP C CHIP C CHIP C CHIP C ELECTRO	470PF 0.010UF 0.47UF 0.010UF 100UF	K K Z K 10WV		
C219-228 C252 C400 C401 C402			CC73FSL1H221J CE04HW1E4R7M CK73FB1C224K CC73FSL1H331J CK73FB1H333K	CHIP C NP-ELEC CHIP C CHIP C CHIP C	220PF 4.7UF 0.22UF 330PF 0.033UF	J 25WV K J K		
C403 C404 C405 C406 C407			CK73FB1H103K CK73FB1E104K CK73FB1C224K CK73FB1H102K CK73FB1H473K	CHIP C CHIP C CHIP C CHIP C CHIP C	0.010UF 0.10UF 0.22UF 1000PF 0.047UF	К К К К		
C408 C409 C410 C411 C412			CK73FB1C154K CK73FB1H102K CK73FF1C105Z CK73FB1E104K CK73FB1H153K	CHIP C CHIP C CHIP C CHIP C CHIP C	0.15UF 1000PF 1.0UF 0.10UF 0.015UF	K K Z K K		
C413 C415 C416 C417 C418			CC73FSL1H221J CK73FB1H123K CK73FB1C474K CC73FSL1H471J CK73FB1H103K	CHIP C CHIP C CHIP C CHIP C CHIP C	220PF 0.012UF 0.47UF 470PF 0.010UF	J K K J		
C419 C420 C421 C422 C423,424		*	C92-0090-05 CK73FB1H332K CC73FSL1H331J C92-0209-05 C92-0093-05	CHIP C CHIP C CHIP C CHIP C CHIP C	22UF 3300PF 330PF 4.7UF 100UF	6.3WV K J 16WV 6.3WV		
L : Scandinavia		ν.	USA P : Canada	R: Mexico	C : China	I : Malavsia		

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Ref. No

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Add-ress

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Parts No.

0

Re-marks

Desti-nation

Description

Ref. No	Add- ress	New Parts	Parts No.	De	escription		Desti- nation	Re- marks
C425 C426 C427 C428 C429			C92-0089-05 CK73FB1H473K CK73FB1E104K CK73FB1H683K C92-0093-05	CHIP C CHIP C CHIP C CHIP C CHIP C	10UF 0.047UF 0.10UF 0.068UF 100UF	6.3WV K K K 6.3WV	-	
C430 C431 C433 C434 C435			CK73FB1H103K CC73FCH1H120J CK73FB1H102K CK73FB1H333K C92-0093-05	CHIP C CHIP C CHIP C CHIP C CHIP C	0.010UF 12PF 1000PF 0.033UF 100UF	K J K K 6.3WV		
C437,438 C442 C443 C445 C451,452			CK73FB1E104K CK73FB1E104K CC73FCH1H060D C92-0093-05 CK73FB1H102K	CHIP C CHIP C CHIP C CHIP C CHIP C	0.10UF 0.10UF 6.0PF 100UF 1000PF	K K D 6.3WV K		
C453,454 C455,456 C457,458 C459,460 C461,462			CC73FSL1H181J CK73FB1H392K CC73FSL1H101J CC73FSL1H181J CC73FSL1H101J	CHIP C CHIP C CHIP C CHIP C CHIP C	180PF 3900PF 100PF 180PF 100PF	J K J J		
C463,464 C465 C466 C469 C471			CC73FSL1H471J CK73FB1H103K C92-0093-05 C92-0093-05 CK73FB1C224K	CHIP C CHIP C CHIP C CHIP C CHIP C	470PF 0.010UF 100UF 100UF 0.22UF	J K 6.3WV 6.3WV K		
C472 C473 C474 C480 C499			C92-0089-05 CK73FB1H102K CK73FB1E104K CE04DW1C471M CC73FSL1H121J	CHIP C CHIP C CHIP C ELECTRO CHIP C	10UF 1000PF 0.10UF 470UF 120PF	6.3WV K K 16WV J		
C500 C502			CC73FSL1H470J CK73FF1C105Z	CHIP C CHIP C	47PF 1.0UF	J Z		
CN1 CN2 CN3 CN4 CN5			E40-4245-05 E40-3240-05 E40-4245-05 E40-9848-05 E40-9831-05	PIN ASSY PIN ASSY PIN ASSY PIN ASSY SOCKET FOR PIN	ASSY			
CN6 CN7 CN8 CN9 CN10		*	E40-4609-05 E40-3246-05 E40-8465-05 E40-4898-05 E40-8466-05	PIN ASSY PIN ASSY FLAT CABLE CON FLAT CABLE CON FLAT CABLE CON	NECTOR			
CN11 CN12 CN13 CN16 CN400		*	E40-4151-05 E40-8200-05 E40-3246-05 E40-4293-05 E40-8464-05	FLAT CABLE CON FLAT CABLE CON PIN ASSY FLAT CABLE CON FLAT CABLE CON	NECTOR NECTOR			
CN401 CN402 CN403 CN404 CN405		* *	E40-8406-05 E40-3251-05 E40-8395-05 E40-8399-05 E40-3261-05	FLAT CABLE CON PIN ASSY FLAT CABLE CON PIN ASSY PIN ASSY				
J1 J2		*	E63-1088-05 E63-1089-05	PHONO JACK (3P PHONO JACK (3P				
L . Coondinovia		,	LICA D. Conodo	D. Mayina C. Chi		. Malayaia		

		1622	Paris						nation	IIIai KS
	J3 J4 J5 P1		*	E63-1082-05 E08-0311-05 E70-0111-05 E29-1625-04	PHONO JACK RECTANGULAR RI SCREW TERMINAI LEAD PLATE		E			
1	691 F1 F1 F1	2D	*	F09-0142-05 F05-4016-05 F05-8013-05 F50-0067-05	FAN FUSE (SEMKO) (2 FUSE (SEMKO) (2 FUSE(5X20)	250V T400N 250V T800N	IAL) IAL)		TE M KY	
	- CN14,15 CN14,15 E1		*	J19-6006-14 J13-0075-05 J13-0092-05 J11-0808-05	HOLDER FUSE CLIP FUSE CLIP WIRE CLAMPER					
^	L1 L2 T1 T1 T1		**	L40-1001-31 L40-1091-31 L07-2755-05 L07-2756-05 L07-2757-05	SMALL FIXED INDI SMALL FIXED INDI POWER TRANSFO POWER TRANSFO POWER TRANSFO	UCTOR(1UI RMER RMER			KY M TE	
	X1 X2 X3 X4 X400		* * *	L78-0294-05 L77-2256-05 L77-2255-05 L78-0696-05 L77-2257-05	CRYSTAL RESONA CRYSTAL RESONA	ATOR(4.332 (6.000MHZ)	MHZ	2)	TE	
	R1 -10 R11 -20 R21 ,22 R23 -28 R29 ,30			RK73FB2A101J RK73FB2A104J RK73FB2A101J RK73FB2A103J RK73FB2A222J	CHIP R CHIP R CHIP R CHIP R CHIP R	100 100K 100 10K 2.2K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	R31 ,32 R33 ,34 R35 ,36 R37 ,38 R39 -42			RK73FB2A104J RK73FB2A102J RK73FB2A393J RK73FB2A621J RS14KB3DR22J	CHIP R CHIP R CHIP R CHIP R FL-PROOF RS	100K 1.0K 39K 620 0.22	J J J	1/10W 1/10W 1/10W 1/10W 2W		
	R43 ,44 R45 ,46 R47 ,48 R49 ,50 R51 ,52			RS14KB3D4R7J RS14KB3A331J RK73FB2A183J RK73FB2A393J RK73FB2A622J	FL-PROOF RS FL-PROOF RS CHIP R CHIP R CHIP R	4.7 330 18K 39K 6.2K	J J J	2W 1W 1/10W 1/10W 1/10W		
	R53 ,54 R55 ,56 R57 ,58 R59 -61 R62			RK73FB2A302J RK73FB2A471J RK73FB2A473J RK73FB2A103J RK73FB2A132J	CHIP R CHIP R CHIP R CHIP R CHIP R	3.0K 470 47K 10K 1.3K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	R63 R64 R65 ,66 R67 ,68 R69			RK73FB2A102J RK73FB2A153J RK73FB2A103J RK73FB2A222J RK73FB2A204J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.0K 15K 10K 2.2K 200K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	R70 R71 R72 R73 ,74 R75 ,76			RK73FB2A473J RK73FB2A222J RK73FB2A152J RK73FB2A102J RK73FB2A204J	CHIP R CHIP R CHIP R CHIP R CHIP R	47K 2.2K 1.5K 1.0K 200K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	R77 R78			RK73FB2A683J RK73FB2A104J	CHIP R CHIP R	68K 100K	J	1/10W 1/10W		
									1	

L: Scandinavia K: USA P: Canada R: Mexico C : China I: Malaysia Y: PX(Far East, Hawaii) T: Europe E: Europe G: Germany V: China (Shanghai) Y: AAFES(Europe) X: Australia Q: Russia H: Korea

I : Malaysia K:USA L : Scandinavia P: Canada R: Mexico C: China Y: PX(Far East, Hawaii) T: Europe E: Europe G: Germany V: China (Shanghai) Y: AAFES(Europe) X: Australia Q: Russia H: Korea

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Y: PX(Far East, Hawaii) T: Europe

Y: AAFES(Europe)

* New Parts
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Ø

L: Scandinavia

Y: AAFES(Europe)

Y: PX(Far East, Hawaii)

K: USA

T : Europe

P: Canada R: Mexico

E: Europe G: Germany

X: Australia Q: Russia H: Korea

C: China

V: China (Shanghai)

I: Malaysia

M : Other Areas
▲ indicates safety critical components.

	Ref. No	Add- ress	New Parts	Parts No.	1	Description			Desti- nation	Re- marks
Δ	R79 ,80 R81 R82 R83 ,84 R85			RK73FB2A123J RK73FB2A183J RD14NB2E1R0J RK73FB2A393J RK73FB2A153J	CHIP R CHIP R RD CHIP R CHIP R	12K 18K 1 39K 15K]	1/10W 1/10W 1/4W 1/10W 1/10W		
	R86 R87 ,88 R89 ,90 R91 ,92 R93 ,94			RK73FB2A511J RK73FB2A222J RK73FB2A104J RK73FB2A473J RK73FB2A101J	CHIP R CHIP R CHIP R CHIP R CHIP R	510 2.2K 100K 47K 100	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
Δ	R100 R101-103 R104 R105,106 R107			RK73FB2A103J RK73FB2A473J RD14NB2E2R2J RK73FB2A752J RK73FB2A101J	CHIP R CHIP R RD CHIP R CHIP R	10K 47K 2.2 7.5K 100]]]	1/10W 1/10W 1/4W 1/10W 1/10W		
1 €	R108 R109 R110 R111 R112		*	RK73FB2A152J RD14NB2E1R0J RK73FB2A511J R92-1922-05 RD14NB2E2R2J	CHIP R RD CHIP R METAL FILM RD	1.5K 1 510 0.22 2.2	J	1/10W 1/4W 1/10W 1/2W 1/4W		
	R113 R114 R115 R116 R117			RK73FB2A221J RK73FB2A821J RK73FB2A103J RK73FB2A393J RK73FB2A222J	CHIP R CHIP R CHIP R CHIP R CHIP R	220 820 10K 39K 2.2K	J	1/10W 1/10W 1/10W 1/10W 1/10W		
Δ. Δ.	R118 R119 R120 R121 R122			RD14NB2E2R2J RK73FB2A471J RK73FB2A473J RK73FB2A472J R92-1844-05	RD CHIP R CHIP R CHIP R CARBON	2.2 470 47K 4.7K 3.3M	J J J	1/4W 1/10W 1/10W 1/10W 1/2W	KY	
<u>1</u>	R123 R124 R125,126 R127 R128			RK73FB2A391J RK73FB2A101J RD14NB2E101J RD14NB2E220J RS14KB3D470J	CHIP R CHIP R RD RD FL-PROOF RS	390 100 100 22 47	J J J	1/10W 1/10W 1/4W 1/4W 2W		
Δ	R129 R130 R131 R132 R134			RK73FB2A4R7J RD14NB2E330J RK73FB2A223J RK73FB2A113J RK73FB2A103J	CHIP R RD CHIP R CHIP R CHIP R	4.7 33 22K 11K 10K]]]	1/10W 1/4W 1/10W 1/10W 1/10W		
	R135 R136,137 R138 R139 R140-142			RD14NB2E391J RK73FB2A102J RK73FB2A472J RK73FB2A473J RK73FB2A101J	RD CHIP R CHIP R CHIP R CHIP R	390 1.0K 4.7K 47K 100]]]	1/4W 1/10W 1/10W 1/10W 1/10W		
	R143 R144 R145 R146 R147			RK73FB2A512J RK73FB2A753J RK73FB2A472J RK73FB2A473J RK73FB2A100J	CHIP R CHIP R CHIP R CHIP R CHIP R	5.1K 75K 4.7K 47K 10]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
	R148 R149 R150 R151 R152			RK73FB2A473J RK73FB2A101J RK73FB2A102J RK73FB2A103J RK73FB2A472J	CHIP R CHIP R CHIP R CHIP R CHIP R	47K 100 1.0K 10K 4.7K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		

E: Europe G: Germany V: China (Shanghai)

X: Australia Q: Russia H: Korea

	Ref. No	Add- ress	New Parts	Parts No.		Description			Desti- nation	Re- marks
Δ	R153 R154 R155 R156 R157			RK73FB2A473J RK73FB2A472J RK73FB2A473J RD14NB2E821J RD14NB2E222J	CHIP R CHIP R CHIP R RD RD	47K 4.7K 47K 820 2.2K))	1/10W 1/10W 1/10W 1/4W 1/4W		
	R158 R159 R160 R161 R162,163			RK73FB2A102J RK73FB2A103J RK73FB2A104J RK73FB2A102J RK73FB2A103J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.0K 10K 100K 1.0K 10K	J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	R164 R165,166 R167,168 R169,170 R171-173			RK73FB2A102J RK73FB2A104J RK73FB2A331J RK73FB2A104J RK73FB2A101J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.0K 100K 330 100K 100	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	R174 R175 R176-178 R179-181 R182			RK73FB2A103J RD14NB2E470J RK73EB2B102J RK73FB2A101J RK73FB2A474J	CHIP R RD CHIP R CHIP R CHIP R	10K 47 1.0K 100 470K	J J	1/10W 1/4W 1/8W 1/10W 1/10W		
	R183-186 R187 R188-191 R192 R193			RK73FB2A101J RK73FB2A473J RK73FB2A101J RK73FB2A100J RK73FB2A101J	CHIP R CHIP R CHIP R CHIP R CHIP R	100 47K 100 10 100	J J	1/10W 1/10W 1/10W 1/10W 1/10W	TE	
	R196-206 R207 R208,209 R210,211 R212			RK73FB2A101J RK73FB2A222J RK73FB2A101J RK73FB2A223J RK73FB2A473J	CHIP R CHIP R CHIP R CHIP R CHIP R	100 2.2K 100 22K 47K	J J	1/10W 1/10W 1/10W 1/10W 1/10W	TE TE TE TE	
	R213-216 R217 R218-220 R221 R222-227			RK73FB2A104J RK73FB2A473J RK73FB2A104J RK73FB2A101J RK73FB2A104J	CHIP R CHIP R CHIP R CHIP R CHIP R	100K 47K 100K 100 100K)]]	1/10W 1/10W 1/10W 1/10W 1/10W		
	R228 R229 R231 R232 R233-235			RK73FB2A103J RK73FB2A101J RK73FB2A103J RK73FB2A473J RK73FB2A104J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 100 10K 47K 100K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	R236 R237 R238 R239 R240			RK73FB2A103J RK73FB2A104J RK73FB2A104J RK73FB2A104J RK73FB2A104J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 100K 100K 100K 100K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W	KYTE KYM KY	
	R241,242 R243 R244,245 R246-248 R249			RK73FB2A104J RK73FB2A104J RK73FB2A104J RK73FB2A473J RK73FB2A104J	CHIP R CHIP R CHIP R CHIP R CHIP R	100K 100K 100K 47K 100K]	1/10W 1/10W 1/10W 1/10W 1/10W	M TE	
	R250-252 R253-255 R260 R261 R262-264			RK73FB2A103J RK73FB2A104J RK73FB2A4R7J RK73FB2A101J RK73FB2A473J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 100K 4.7 100 47K]	1/10W 1/10W 1/10W 1/10W 1/10W		
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Ref. No	Add- ress	New Parts	Parts No.		Description			Desti- nation	Re- mark
R265,266 R267 R289 R290 R291			RK73FB2A103J RK73FB2A101J RK73FB2A753J RK73FB2A333J RK73FB2A104J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 100 75K 33K 100K	1	1/10W 1/10W 1/10W 1/10W 1/10W		
R292-294 R295 R297-304 R310 R311			RK73FB2A101J RK73FB2A473J RK73FB2A101J RK73FB2A103J RK73FB2A393J	CHIP R CHIP R CHIP R CHIP R CHIP R	100 47K 100 10K 39K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R320 R321 R400-405 R406 R407			RK73FB2A224J RK73FB2A152J RK73FB2A473J RK73FB2A101J RK73FB2A104J	CHIP R CHIP R CHIP R CHIP R CHIP R	220K 1.5K 47K 100 100K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R408 R409 R410 R411 R412			RK73FB2A222J RK73FB2A472J RK73FB2A102J RK73FB2A273J RK73FB2A561J	CHIP R CHIP R CHIP R CHIP R CHIP R	2.2K 4.7K 1.0K 27K 560]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R413 R414 R415 R416 R417			RK73FB2A104J RK73FB2A103J RK73FB2A392J RK73FB2A682J RK73FB2A472J	CHIP R CHIP R CHIP R CHIP R CHIP R	100K 10K 3.9K 6.8K 4.7K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R418 R419 R420 R421 R422			RK73FB2A223J RK73FB2A103J RK73FB2A272J RK73FB2A101J RK73FB2A223J	CHIP R CHIP R CHIP R CHIP R CHIP R	22K 10K 2.7K 100 22K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R425,426 R427 R428 R429 R430			RK73FB2A102J RK73FB2A473J RK73FB2A393J RK73FB2A473J RK73FB2A563J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.0K 47K 39K 47K 56K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R431 R432 R433 R434 R435			RK73FB2A222J RK73FB2A225J RK73FB2A563J RK73FB2A104J RK73FB2A123J	CHIP R CHIP R CHIP R CHIP R CHIP R	2.2K 2.2M 56K 100K 12K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R436,437 R438 R439 R440 R441			RK73FB2A224J RK73FB2A333J RK73FB2A2R2J RK73FB2A100J RK73FB2A331J	CHIP R CHIP R CHIP R CHIP R CHIP R	220K 33K 2.2 10 330]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R442 R443 R444 R445 R446			RK73FB2A123J RK73FB2A473J RK73FB2A331J RK73FB2A153J RK73FB2A2R2J	CHIP R CHIP R CHIP R CHIP R CHIP R	12K 47K 330 15K 2.2]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R448 R449 R450 R451 R452			RK73FB2A103J RK73FB2A105J RK73FB2A2R2J RK73FB2A471J RK73FB2A152J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 1.0M 2.2 470 1.5K]	1/10W 1/10W 1/10W 1/10W 1/10W		

L : Scandinavia	K:USA	P: Canada	R: Mexico	C: China	I: Malaysia
Y: PX(Far East, Hawaii)	T: Europe	E: Europe	G: Germany	V: China (Shanghai)	

Y: AAFES(Europe) X: Australia Q: Russia H: Korea

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Ref. No	Add- ress	New Parts	Parts No.		Description			Desti- nation	Re- mark
R453 R454 R455 R456 R457			RK73FB2A104J RK73FB2A681J RK73FB2A513J RK73FB2A122J RK73FB2A333J	CHIP R CHIP R CHIP R CHIP R CHIP R	100K 680 51K 1.2K 33K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R461-464 R465-468 R469,470 R471-474 R475,476			RK73FB2A472J RK73FB2A562J RK73FB2A113J RK73FB2A302J RK73FB2A113J	CHIP R CHIP R CHIP R CHIP R CHIP R	4.7K 5.6K 11K 3.0K 11K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R477,478 R479 R481,482 R483 R484			RK73FB2A101J RK73FB2A393J RK73FB2A302J RK73FB2A2R2J RK73FB2A163J	CHIP R CHIP R CHIP R CHIP R CHIP R	100 39K 3.0K 2.2 16K)))	1/10W 1/10W 1/10W 1/10W 1/10W		
R485 R487 R488 R489 R490			RK73FB2A103J RK73FB2A562J RK73FB2A223J RK73FB2A103J RK73FB2A332J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 5.6K 22K 10K 3.3K)))	1/10W 1/10W 1/10W 1/10W 1/10W		
R491 R492 R493 R494 R495			RK73FB2A224J R92-1867-05 RK73FB2A182J RK73FB2A103J R92-1915-05	CHIP R METAL CHIP R CHIP R METAL GLAZE	220K 12K 1.8K 10K 4.12K	J J J F	1/10W 1/10W 1/10W 1/10W 1/10W		
R496 R497 R498 R500 R501			R92-1839-05 RK73FB2A103J RK73FB2A333J RK73FB2A512J RK73FB2A101J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.5K 10K 33K 5.1K 100	F J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R502 R503-506 R507-510 R511-514 R515			RK73FB2A1R0J RK73FB2A103J RK73FB2A101J RK73FB2A153J RK73FB2A473J	CHIP R CHIP R CHIP R CHIP R CHIP R	1 10K 100 15K 47K	J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R516,517 R519 R520,521 R522 R523			RK73FB2A153J RK73FB2A105J RK73FB2A224J RK73FB2A473J RK73FB2A103J	CHIP R CHIP R CHIP R CHIP R CHIP R	15K 1.0M 220K 47K 10K]]]	1/10W 1/10W 1/10W 1/10W 1/10W		
R530 R537 VR400,401 W6 ,7			RK73FB2A910J RK73FB2A104J R32-0040-05 R92-0670-05	CHIP R CHIP R SEMI FIXED VAR CHIP R 0 OHM		J J SISTOI	1/10W 1/10W R		
K1 K2 K3 S1		*	\$76-0091-05 \$76-0092-05 \$76-0027-05 \$90-0129-05	MAGNETIC RELA MAGNETIC RELA MAGNETIC RELA SWITCH COMPO	Y Y				
PH1 -4		*	T95-0163-05	OPTO ISOLATOR					
D1 D2 D3 ,4 D5 D6 -8			UDZ10B UDZ3.9B MA111 UDZ5.1B MA111	ZENER DIODE ZENER DIODE DIODE ZENER DIODE DIODE					
L : Scandinavia Y : PX(Far East			USA P: Canada Europe E: Europe	R: Mexico C: Cl G: Germany V: Cl	hina hina (Shangha		Malaysia		

PARTS LIST

Ø

* New Parts
Parts without **Parts No.** are not supplied.
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Ø

L: Scandinavia

Y: AAFES(Europe)

Y: PX(Far East, Hawaii) T: Europe

K: USA

P: Canada R: Mexico

X: Australia Q: Russia H: Korea

C: China

E: Europe G: Germany V: China (Shanghai)

	Teile ohne F	Parts No	New	erden nicht geliefert.		Desti	
	Ref. No	ress	Parts	Parts No.	Description	Desti- nation	Re- marks
Δ Δ	D9 D10 D11 D12 D13		*	UDZ4.7B D5SBA20F02 D2SBA20F03 MA111 UDZ11B	ZENER DIODE DIODE DIODE DIODE ZENER DIODE		
◮	D14 D15 D16 D17 D18			UDZ13B UDZ6.8B MA111 UDZ6.2B S1ZB20(4101)	ZENER DIODE ZENER DIODE DIODE ZENER DIODE DIODE		
Δ	D19 ,20 D21 D22 -27 D28 D28			MA111 UDZ6.2B MA111 DAN202U 1SS301	DIODE ZENER DIODE DIODE DIODE DIODE DIODE		
	D29 D30 D31 -39 D40 D41			UDZ3.9B UDZ4.7B MA111 MA111 MA111	ZENER DIODE ZENER DIODE DIODE DIODE DIODE DIODE	TE	
	D42 D43 D44 D45 D400-404			UDZ10B MA111 UDZ4.7B MA111 MA111	ZENER DIODE DIODE ZENER DIODE DIODE DIODE		
Δ	IC1 IC2 IC3 IC4 IC5		*	STK499-090 LC75396NE BU4066BCF M30622MC-570FP HD6433297A17F	HYBRID IC ANALOGUE IC ANALOGUE IC MI-COM IC MI-COM IC		
Δ Δ	IC6 IC7 IC8 IC9 IC10		*	UPC2905HF SAA6579T/R NJM4565M S-806D-Z SI-3050J	ANALOGUE IC ANALOGUE IC ANALOGUE IC ANALOGUE IC ANALOGUE IC	TE	
	IC11 IC400 IC401 IC402 IC403		*	NJM4565M LA9241M LC78628E M56788FP NJM2100M	ANALOGUE IC DI BI-POLAR IC MOS-IC ANALOGUE IC IC(OP AMPLIFIER)		
	Q1 ,2 Q3 -6 Q7 -9 Q7 -9 Q10			2SC4213(B) 2SC1845(F,E) 2SC4116(Y,GR) 2SC4177(L5,L6) 2SA992(F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
	Q11 Q12 Q13 -15 Q16 ,17 Q16 ,17		*	2SA1576A(S) 2SC4213(B) UN5219 2SC4116(Y,GR) 2SC4177(L5,L6)	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR		
<u>∧</u> <u>∧</u>	Q18 Q18 Q20 Q21 Q22			DTA124EUA UN5112 2SD2495*2 2SC1740S(Q,R) 2SD2495*2	DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		

L: Scandinavia		Κ:	USA	P: Canada	R: Mexico	C: China	I : Malaysia		
Y: PX(Far East,	Hawaii)	T:	Europe	E: Europe	G: Germany	V: China (Shanghai)			
Y: AAFES(Euro	pe)	Χ:	Australia	Q:Russia	H: Korea	M: Other Areas	▲ indicates safet	y critical comp	onents.

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Description		Ref. No	Add- ress	New Parts	Parts No.	D	escription			Desti- nation	Re- marks
∆ ∆ 323 a Q40 * 258764(E, F) 258764(E, F) 258764(E, F) 2564178(L, E) 264178(L, E) 26		Q24 Q25 ,26 Q25 ,26	1633	Tats	2SC1740S(Q,R) 2SC4116(Y,GR) 2SC4177(L5,L6)	TRANSISTOR TRANSISTOR TRANSISTOR	·			nation	mark
Q550		Q32 Q33 Q40		*	2SA1576A(S) 2SB764(E,F) 2SC4116(Y,GR)	TRANSISTOR TRANSISTOR TRANSISTOR					
Q404	Δ	Q50 Q400 Q401			2SC4177(L5,L6) 2SB1424(Q,R) DTC124EUA	TRANSISTOR TRANSISTOR DIGITAL TRANSIS					
DTC124EUA DIGITAL TRANSISTOR DIGITAL TRANSIST		Q404 Q410-413 Q414,415		*	2SB1424(Q,R) 2SA1576A(S) DTC143TUA	TRANSISTOR TRANSISTOR DIGITAL TRANSIS					
DISPLAY UNIT (X14-496X-XX)		Q530			DTC124EUA	DIGITAL TRANSIS					
D11		A1			W02-1114-15	OSCILLATING MO	DULE				
D12					DISPLAY	UNIT (X14-4	196X-XX	()			
C2 C3 ,4 CC45FCH1H221J CERAMIC 220PF J C73FCH1H221J CK73FB1H103K C90-2595-05 ELECTRO 4.7UF 16WV C14 ,15 CC73FCH1H271J CCFRAMIC 220PF J CK73FB1H103K C90-2595-05 ELECTRO 4.7UF 16WV C14 ,15 CC73FCH1H471J CC73FCH1H471J CC73FCH1H471J CC73FCH1H220J CC73FCH1H220J CC73FCH1H220J CC73FCH1H220J CC73FCH1H220J CC73FCH1H220J CHIP C 22PF J TE CN1 E40-4936-05 FLAT CABLE CONNECTOR SOCKET FOR PIN ASSY PONO JACK J3 E40-3247-05 PIN ASSY LOCK TERMINAL BOARD PHONO JACK J3 * E11-0392-05 PHONE JACK (7P) E5 * F10-1149-04 SHIELDING PLATE SHIELDING PLATE L1 * L40-2701-31 SMALL FIXED INDUCTOR(27UH) SMALL FIXED INDUCTOR(10UH,K) TE L1 * L40-2701-31 SMALL FIXED INDUCTOR(10UH,K) TE R1 ,2 RK73FB2A101J CHIP R 1.00 J 1/10W RK73FB2A821J CHIP R 1.8K J 1/10W RK73FB2A821J CHIP R 820 J 1/10W RK73FB2A821J CHIP R 820 J 1/10W RK73FB2A473J CHIP R 8.2K J 1/10W CHIP R 8.2K J 1/1											
C20.21 C22-24 CC73FCH1H471J CC73FCH1H220J CC73FCH1H220J CN1 E40-4936-05 E40-4288-05 SOCKET FOR PIN ASSY CN3 J1 E70-0052-05 E63-0164-05 PHONO JACK F10-1149-04 F10-1146-04 SHIELDING PLATE L1 L2 -4 RK73FB2A101J RK73FB2A182J RK73FB2A821J RK73FB2A473J		C2 C3 ,4 C11			CC45FCH1H221J CC73FCH1H221J CK73FB1H103K	CERAMIC CHIP C CHIP C	220PF 220PF 0.010UF		J J K	KMY	
CN2 CN3 E40-4288-05 E40-3247-05 E40-3247-05 E70-0052-05 LOCK TERMINAL BOARD PHONO JACK J3 * E11-0392-05 PHONE JACK (7P) E5 * F10-1149-04 F10-1146-04 SHIELDING PLATE SHIELDING PLATE SHIELDING PLATE SHIELDING PLATE SHIELDING PLATE L1 * L40-2701-31 L40-1001-31 SMALL FIXED INDUCTOR(27UH) SMALL FIXED INDUCTOR(10UH,K) TE R1 ,2 RK73FB2A182J RK73FB2A182J RK73FB2A821J CHIP R RS R4 RK73FB2A821J RK73FB2A821J RK73FB2A821J RK73FB2A822J RK73FB2A821J CHIP R RS RC RK73FB2A8231 CHIP R RS RC RK73FB2A8231 CHIP R RS RC RK73FB2A8731 CHIP R RK7		C20 ,21			CC73FCH1H471J	CHIP C	470PF		J		
E5		CN2 CN3 J1			E40-4288-05 E40-3247-05 E70-0052-05	SOCKET FOR PIN PIN ASSY LOCK TERMINAL	ASSY				
E6		J3		*	E11-0392-05	PHONE JACK (7	7P)				
L2 -4											
R3				*					TE		
R7 RK73FB2A102J CHIP R 1.0K J 1/10W		R3 R4 R5			RK73FB2A182J RK73FB2A821J RK73FB2A822J	CHIP R CHIP R CHIP R	1.8K 820 8.2K	J J J	1/10W 1/10W 1/10W		
		R7			RK73FB2A102J	CHIP R	1.0K	J	1/10W		

I : Malaysia

M : Other Areas
▲ indicates safety critical components.

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Ref. No	Add- ress	New Parts	Parts No.			Desti- nation	Re- marks		
R13 R14 R15 R16 R17			RK73FB2A473J RK73EB2B101J RK73FB2A473J RK73EB2B101J RK73FB2A473J	CHIP R CHIP R CHIP R CHIP R CHIP R	47K 100 47K 100 47K	J	1/10W 1/8W 1/10W 1/8W 1/10W		
R25 R26 R40 ,41 R42 W1 ,2			RK73FB2A332J RK73FB2A103J RK73FB2A101J RK73FB2A101J R92-0679-05	CHIP R CHIP R CHIP R CHIP R CHIP R	3.3K 10K 100 100 0 OHM	J	1/10W 1/10W 1/10W 1/10W	TE	
W3 W5 ,6 W7 ,8 W12 W21 -24			R92-0670-05 R92-0670-05 R92-0679-05 R92-0679-05 R92-0670-05	CHIP R CHIP R CHIP R CHIP R CHIP R	0 OHM 0 OHM 0 OHM 0 OHM 0 OHM			TE	
W25 ,26			R92-0679-05	CHIP R	0 OHM			KMY	
S2 S3 -13			\$70-0072-05 \$70-0031-05	TACT SWITCH TACT SWITCH					
S1		*	T99-0619-05	ROTARY ENCO	DER				
D1 D13 Q1 ,2 Q3 Q3			UDZ3.3B MA111 2SC4213(B) 2SA1586(Y,GR) 2SA1611(M5,M6)	ZENER DIODE DIODE TRANSISTOR TRANSISTOR TRANSISTOR					
Q11 Q11 Q12 ,13 Q12 ,13			2SC1740S(Q,R) 2SC2785(F,E) 2SC4081(R,S) 2SC4116(Y,GR)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR					
A1 A1 A2		*	W02-2673-15 W02-2674-15 W02-2571-05	TUNER ASSY TUNER ASSY OPTIC RECEIVIN	NG MODULE			KMY TE	
			CD MECH	ANISM (D40	0-1638-0	5)			
1 2 3 4 5	2A 2B 1B 1B	****	J21-6716-08 J21-6718-08 A11-1162-08 G01-4133-08 G01-4135-08	MOUNTING HAR MOUNTING HAR SUB CHASSIS A EXTENSION SPE EXTENSION SPE	DWARE ASS SSY(DISC G RING(ARM L)	SY(RI UIDE	EAR)		
6 7 8 9 10	1B 1A 1A 1A 2A	****	G01-4136-08 A11-1160-08 G16-0971-08 A11-1166-08 A11-1157-08	EXTENSION SPE SUB CHASSIS A: SHEET(CLAMP) SUB CHASSIS A: SUB CHASSIS A:	SSY(ČLAMP SSY(ROLLEI) R UN	,		
11 12 13 14 15	3A 2A 3A 3A 3B	* * * *	A11-1158-08 D14-0670-04 D10-3878-08 D23-0333-08 D13-1939-08	SUB CHASSIS C. ROLLER ROD RETAINER GEAR(ROLLER)	AULKING AS	SSY(F	ROLL	E	
16 17 18 19 20	3A 2A 2A 2A 1A,2A	** **	B09-0266-08 J90-0869-08 W10-0704-04 J21-6720-08 G01-4134-08	CAP GUIDE(DISC) PRISM MOUNTING HAR EXTENSION SPF					

L : Scandinavia	K: USA	P: Canada	R: Mexico	C: China	I: Malaysia	
Y: PX(Far East, Hawaii)	T: Europe	E: Europe	G: Germany	V: China (Shanghai)	-	
Y: AAFES(Europe)	X : Australia	Q: Russia	H: Korea	M: Other Areas	indicates safety critical	components.

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	Parts No). WE	erden nicht geliefert.	o. ne sont pas fournis.		-
Ref. No	Add- ress	New Parts	Parts No.	Description	Desti- nation	Re- mark
23 24 25 26 27	2B 2B 1A 2B 3B	* * * * *	D13-1933-08 D13-1934-08 T50-1082-08 D13-1935-08 D13-1936-08	GEAR(PULLEY) GEAR(A) YOKE GEAR(B) GEAR(C)		
28 30 31 32 33	3B 1B 2B 3B 1A	* * * * *	D10-3875-08 D10-3888-08 D10-3877-08 D10-3873-08 J11-0845-08	SLIDER ASSY(CHASSIS LOCK) SLIDER(DISC GUIDE) ARM(TRIGGER) SLIDER ASSY(LOADING) CLAMPER		
35 36 37 38 39	3B 2B 2B 3B 2A	***	D13-1937-08 D13-1938-08 A10-3474-08 D16-0729-08 J02-1448-05	GEAR(IDLER) GEAR(FINAL) CHASSIS ASSY(MAIN) BELT INSULATOR(RED)		
10 11 12 16 19	2B 3B 3A 1B 2B	***	J02-1447-05 G01-4131-08 G01-4132-08 G16-0972-08 D40-1639-05	INSULATOR(GREEN) EXTENSION SPRING(SLIDER) EXTENSION SPRING(CHASSIS LOCK) SHEET(TU) TRAVERSE UNIT(KSM-770AAA)		
50 51 52 53 54	3A 3A 3B 1A 3B	* * * * *	J26-0096-08 J80-0024-08 E35-2353-05 G16-0973-08 T42-0946-08	PCB ASSY FPC FFC(9P) SHEET MOTOR ASSY		
AA AB AC AD AE		*	N09-5129-08 N89-2606-46 N09-5113-08 N19-1105-04 N09-3366-08	SCREW SCREW SCREW WASHER 1.6X4X0.5 SCREW		
: Scandinavi	a	K:	USA P : Canada	R: Mexico C: China I: Malaysia		

Y: PX(Far East, Hawaii) T: Europe E: Europe G: Germany V: China (Shanghai) X: Australia Q: Russia H: Korea M: Other Areas ▲ indicates safety critical components. Y: AAFES(Europe)



SPECIFICATIONS

(For U.S.A. and U.S. military)

[Amplifier section]

Rated power output

Continuous rated power output (FTC)

15 watts per channel minimum RMS, both channels driven, at 6 Ω 60 Hz to 20,000 Hz with no more than 0.9 % total harmonic distortion.

Total harmonic distortion 0.05 % (1 kHz, 10 W, 6 Ω) Frequency response
Line (AUX, TAPE, MD)20 Hz ~ 50 kHz, +0 dB, -3 dB
Signal to noise ratio Line (AUX,TAPE, MD)
BASS
Line (AUX, TAPE, MD) 210 mV / 47 kΩ Output level / Impedance
TAPE REC (MD REC)
[FM Tuner section] Tuning frequency range
50 dB quieting sensitivity (at 75 Ω) STEREO 35 μ V / 42.2 dBf
Total harmonic distortion (at 1 kHz) MONO
Signal to noise ratio (at 1 kHz, 75 kHz Dev.) MONO
+0.5 dB, -3.0 dB
[AM Tuner section]
Tuning frequency range 530 kHz ~ 1700 kHz Usable sensitivity (30 % mod., S/N 20 dB)

(For U.K. and Europe)

[Amplifier section]

Rated power output

Effective output poewr (1 kHz, 6 Ω)(DIN)

...... 16 W + 16 W Output poewr (1 kHz, 6 Ω ,10 %) (MRS) 20 W + 20 W Total harmonic distortion 0.05 % (1 kHz, 10 W, 6 Ω) Frequency response Line (AUX, TAPE, MD) 20 Hz ~ 50 kHz, +0 dB, -3 dB Signal to noise ratio Tone control BASS ± 8 dB (at 120 Hz) TREBLE ± 8 dB (at 10 kHz) Input sensitivity / Impedance Line (AUX, TAPE, MD) 210 mV / 47 k Ω Output level / Impedance

IFM Tuner section1

Usable sensitivity (DIN at 75 Ω)

MONO 1.6 μV / 14.2 dBf (40 kHz dev., S/N 26 dB)
STEREO 45 μV / 44.2 dBf (46 kHz dev., S/N 46 dB)
Total harmonic distortion (DIN at 1 kHz)
MONO 0.3 % (65.2 dBf input)
STEREO 0.9 % (65.2 dBf input)
Signal to noise ratio (at 1 kHz, 75 kHz Dev.)
MONO 65 dB (40 kHz dev., 65.2 dBf input)
STEREO 59 dB (40 kHz dev., 65.2 dBf input)
Stereo separation (DIN) (1 kHz)
Selectivity (DIN± 300 kHz) 64 dB
Frequency response (100 Hz ~ 15 kHz)
+0.5 dB, -3.0 dB
Stereo separation (1 kHz)

[AM Tuner section]

Tuning frequency range 531 kHz ~ 1602 kHz				
Usable sensitivity (30 % mod., S/N 20 dB)				
Signal to noise ratio (at 30 % mod., 1 mV input)				
45 dB				

[CD player section]

Laser	Semiconductor laser
Playing rotation	200 rpm ~ 500 rpm (CLV)
Frequency response	4 Hz ~ 20 kHz
Signal to noise ratio	More than 96 dB
Total harmonic distortion	Less than 0.01 % (at 1 kHz)
Channel separation	More than 92 dB (at 1 kHz)
Wow & Flutter	Unmeasurable Limit
Output level / Impedance	
Fixed	1.2 V / 1 kΩ

......45 dB

Digital output	
Optical	$-15 \text{ dBm} \sim -21 \text{ dBm}$
(wave length 660 nm)	

[General]		
Power consumption		60 W
Dimensions		
(Horizontal installation)	W: 247 mm	(9-3/4 in.)
	H: 96 mm	(3-7/8 in.)
	D: 291 mm	(11-1/2 in.)
Weight (net)	4.	0 kg (8.1 lb)



- 1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
- 2. Sufficient performance may not be possible at very low temperatures (0°C or less).

Note:

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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